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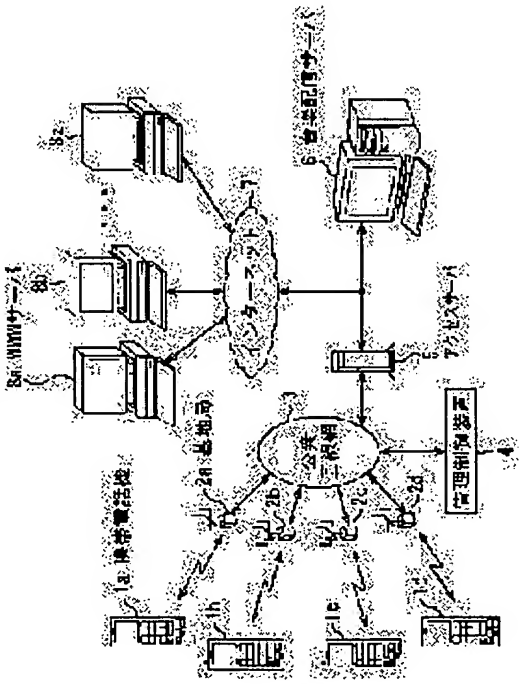
(54) DEVICE, METHOD, AND SYSTEM FOR INFORMATION PROCESSING AND RECORDING MEDIUM

(57)Abstract:
PROBLEM TO BE SOLVED: To enable a user to receive distributed music contents without knowing the title, etc., of the distributed music contents.
SOLUTION: A portable telephone set 1 sends a hummed tune of desired music to be distributed, music data generated by recording desired music to be distributed which is listened to in towns, or part of the text of the desired music to be distributed as relative data to a music distributing server 6. The music distributing server 6 retrieves the desired music to be distributed according to the relative data received from the portable telephone set 1 and sends music contents for audition of a candidate for the music to the portable telephone set 1. The portable telephone set 1 receives them and the user listens to the music contents sent as the candidate for the music, determines the desired music contents, and receives the contents distributed from the music distributing server 6.



CLAIMS

[Claim(s)]
[Claim 1]An information processor comprising:

An input means which inputs associated data of a musical piece.
A musical piece associated data memory measure which memorizes associated data of said musical piece inputted by said input means.
A musical piece associated data transmitting means which transmits associated data of said musical piece memorized by said memory measure to other information processors.
A music content reception means which receives a music content of said musical piece distributed from an information processor besides the above based on associated data of said musical piece transmitted by said musical piece associated data transmitting means.

[Claim 2]The information processor according to claim 1, wherein said information processor contains a portable information processing terminal.
[Claim 3]The information processor according to claim 1, wherein associated data of said musical piece contains humming of said musical piece, music data of said musical piece, and words of said musical piece.
[Claim 4]Have further a purchase request means to require the purchase of a music content of said musical piece, and said musical piece associated data transmitting means, Transmit further pertinent information on said musical piece of a music content of said musical piece as which purchase was required by said purchase request means to an information processor besides the above, and said music content reception means, The information processor according to claim 1 receiving further a music content of said musical piece as which said purchase was required.
[Claim 5]An information processing method comprising:
An input step which inputs associated data of a musical piece.
A musical piece associated data memory step which memorizes associated data of said musical piece inputted by processing of said input step.
A musical piece associated data transmission step which transmits associated data of said musical piece memorized by processing of said memory step to other information processors.
A music content receiving step which receives a music content of said musical piece distributed from an information processor besides the above based on associated data of said musical piece transmitted by processing of said musical piece associated data transmission step.

[Claim 6]A recording medium with which a program which a computer can read is recorded, comprising:
An input control step which controls an input of associated data of a musical piece.
A musical piece associated data storage control step which controls memory of associated data of said musical piece inputted by processing of said input control step.
A musical piece associated data transmission-control step which controls transmission to other information processors of associated data of said musical piece memorized by processing of said storage control step.
A music content reception-control step which controls reception of a music content of said musical piece distributed from an information processor besides the above based on associated data of said musical piece transmitted by processing of said musical piece associated data transmission-control step.

[Claim 7]An information processor comprising:
A music content memory measure which memorizes a music content of two or more musical pieces.
A musical piece associated data reception means which receives associated data of a musical piece from other information processors.
A music content search means to search a music content of said musical piece corresponding to associated data of said musical piece received by said musical piece associated data reception means among music contents of two or more of said musical pieces memorized by said music content memory measure.
A music content distribution means which distributes a music content of said musical piece searched by said music content search means to an information processor besides the above.

[Claim 8]The information processor according to claim 7, wherein an information processor besides the above contains a portable information processing terminal.
[Claim 9]The information processor according to claim 7, wherein associated data of said musical piece contains humming of said musical piece, music data of said musical piece, and words of said musical piece.
[Claim 10]From an information processor besides the above, have further a music content purchase request reception means which receives a purchase request of a music content of a musical piece, and said music content search means, Search associated data of said musical piece of a music content of said musical piece as which purchase was required by said purchase request reception means, and said music content distribution means, The information processor according to claim 7 distributing a music content of said musical piece as which said purchase was required to an information processor besides the above.
[Claim 11]An information processing method comprising:
A music content memory step which memorizes a music content of two or more musical pieces.
A musical piece associated data receiving step which receives associated data of a musical piece from other information processors.
A music content searching step which searches a music content of said musical piece corresponding to associated data of said musical piece received by processing of said musical piece associated data receiving step among music contents of two or more of said musical pieces memorized by processing of said music content memory step.
A music content distributing step which distributes a music content of said musical piece searched with processing of said music content searching step to an information processor besides the above.

[Claim 12]A recording medium with which a program which a computer can read is recorded, comprising:
A music content storage control step which controls memory of music data of two or more musical pieces.
A musical piece associated data reception-control step which controls reception of associated data of a musical piece from other information processors.
A music content search control step which controls search of a music content of said musical piece corresponding to associated data of said musical piece received by processing of said musical piece associated data reception-control step among music contents of two or more of said musical pieces memorized by processing of said music content storage control step.
A music content distribution control step which controls distribution to an information processor besides the above of a music content of said musical piece searched with processing of said music content search control step.

[Claim 13]An information processing system which consists of the 1st information processor characterized by comprising the following that receives a music content, and the 2nd information processor that distributes said music content.
An input means as which said 1st information processor inputs associated data of a musical piece.
A musical piece associated data memory measure which memorizes associated data of said musical piece inputted by said input means.
A musical piece associated data transmitting means which transmits associated data of said musical piece memorized by said memory measure to said 2nd information processor.
Based on associated data of said musical piece transmitted by said musical piece associated data transmitting means, A music content memory measure is provided with a music content reception means which receives a music content of said musical piece distributed from said 2nd information processor, and said 2nd information processor remembers a music content of two or more musical pieces to be.
A musical piece associated data reception means which receives associated data of a musical

piece from said 1st information processor.
A music content search means to search a music content of said musical piece corresponding to associated data of said musical piece received by said musical piece associated data reception means among music contents of two or more of said musical pieces memorized by said music content memory measure.
A music content distribution means which distributes a music content of said musical piece searched by said music content search means to said 1st information processor.

[Claim 14]The information processing system according to claim 13, wherein said 1st information processor contains a portable information processing terminal.
[Claim 15]The information processing system according to claim 13, wherein associated data of said musical piece contains humming of said musical piece, music data of said musical piece, and words of said musical piece.
[Claim 16]Said 1st information processor is further provided with a purchase request means to require the purchase of a music content of said musical piece, and said musical piece associated data transmitting means, Transmit and pertinent information on said musical piece of a music content of said musical piece as which purchase was required by said purchase request means said 2nd information processor, Have further a purchase request reception means which receives a demand of the purchase of a music content of a musical piece transmitted by musical piece associated data transmitting means of said 1st information processor, and said music data search means, Search said music content as which purchase was required by said purchase request reception means, and said music content distribution means, The information processor according to claim 13, wherein it distributes said music content as which said purchase was required to said 1st information processor and said music content reception means receives a music content of said musical piece as which said purchase was required.
[Claim 17]An information processing method of an information processing system which consists of the 1st information processor characterized by comprising the following that receives a music content, and the 2nd information processor that distributes said music content.
An input step into which an information processing method of said 1st information processor inputs associated data of a musical piece.
A musical piece associated data memory step which memorizes associated data of said musical piece inputted by processing of said input step.
A musical piece associated data transmission step which transmits associated data of said musical piece memorized by processing of said memory step to said 2nd information processor.
Based on associated data of said musical piece transmitted by processing of said musical piece associated data transmission step, A music content memory step an information processing method of said 2nd information processor remembers a music content of two or more musical pieces to be including a music content receiving step which receives a music content of said musical piece distributed from said 2nd information processor.
A musical piece associated data receiving step which receives associated data of a musical piece from said 1st information processor.
A music content searching step which searches a music content of said musical piece corresponding to associated data of said musical piece received by processing of said musical piece associated data receiving step among music contents of two or more of said musical pieces memorized by processing of said music content memory step.
A music content distributing step which distributes a music content of said musical piece searched with processing of said music content searching step to said 1st information processor.

[Claim 18]The 1st information processor that receives a music content.
The 2nd information processor that distributes said music content.
Are the recording medium with which a program which a computer provided with the above can read is recorded, and a program which controls said 1st information processor, An input control step which controls an input of associated data of a musical piece, and a musical piece associated data storage control step which controls memory of associated data of said musical

piece inputted by processing of said input control step, A musical piece associated data transmission-control step which controls transmission to said 2nd information processor of associated data of said musical piece memorized by processing of said storage control step, Based on associated data of said musical piece transmitted by processing of said musical piece associated data transmission-control step, A program which controls said 2nd information processor including a music content reception-control step which controls reception of a music content of said musical piece distributed from said 2nd information processor, A music content storage control step which controls memory of a music content of two or more musical pieces, Inside of a music content of two or more of said musical pieces memorized by processing of a musical piece associated data reception-control step which controls reception of associated data of a musical piece from said 1st information processor, and said music content storage control step, A music content search control step which controls search of a music content of said musical piece corresponding to associated data of said musical piece received by processing of said musical piece associated data reception-control step, A music content distribution control step which controls distribution to said 1st information processor of a music content of said musical piece searched with processing of said music content search control step is included.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention]This invention about an information processor and a method, an information processing system, and a recording medium, Even when the track name or artist name of a music content a user expects distribution especially are not known, humming of the musical piece, music data, Or it is related with the information processor and the method, information processing system, and recording medium which enabled it to receive distribution of the music content of a desired musical piece in inputting some words.
[0002]
[Description of the Prior Art]Generally the music distribution service which receives distribution of a music content with a Personal Digital Assistant is spreading.
[0003]In this music distribution service, a user uses a portable telephone as a Personal Digital Assistant, The music distribution server (music distribution site) managed by the entrepreneur of music distribution service is accessed, a desired music content is specified, and it is that of the potato of receiving distribution of a music content, in exchange for a reasonable consideration.
[0004]
[Problem(s) to be Solved by the Invention]By the way, distribution of the music content of the musical piece which is flowing while the user is watching a musical piece, television, etc. which were heard while he was walking along the town may be planned. However, since the user was

not able to tell of which musical piece he wishes distribution to the above-mentioned music distribution server if the information of the track name or artist name of the musical piece is not known, the technical problem that music distribution service could not be received occurred as a result.
[0005]Even when the track name or artist name of a music content with which this invention is made in view of such a situation and a user expects distribution are not known, A music distribution server searches a desired music content, and enables it to distribute based on this music associated data by inputting music associated data, such as humming of that musical piece, music data, or some words.
[0006]
[Means for Solving the Problem]This invention is characterized by the 1st information processor comprising the following.
An input means which inputs associated data of a musical piece.
A musical piece associated data memory measure which memorizes associated data of a musical piece inputted by an input means.
A musical piece associated data transmitting means which transmits associated data of a musical piece memorized by a memory measure to other information processors.
A music content reception means which receives a music content of a musical piece distributed from other information processors based on associated data of a musical piece transmitted by musical piece associated data transmitting means.

[0007]A portable information processing terminal can be included in said information processor.
[0008]Humming of a musical piece, music data of a musical piece, and words of a musical piece can be included in associated data of said musical piece.
[0009]Can form further a purchase request means to require the purchase of a music content of said musical piece, and a musical piece associated data transmitting means, Pertinent information on a musical piece of a music content of a musical piece as which purchase was required by a purchase request means is further transmitted to other information processors, and the music content reception means can make a music content of a musical piece as which purchase was required receive further.
[0010]This invention is characterized by the 1st information processing method comprising the following.
An input step which inputs associated data of a musical piece.
A musical piece associated data memory step which memorizes associated data of a musical piece inputted by processing of an input step.
A musical piece associated data transmission step which transmits associated data of a musical piece memorized by processing of a memory step to other information processors.
A music content receiving step which receives a music content of a musical piece distributed from other information processors based on associated data of a musical piece transmitted by processing of a musical piece associated data transmission step.

[0011]This invention is characterized by a program of the 1st recording medium comprising the following.
An input control step which controls an input of associated data of a musical piece.
A musical piece associated data storage control step which controls memory of associated data of a musical piece inputted by processing of an input control step.
A musical piece associated data transmission-control step which controls transmission to other information processors of associated data of a musical piece memorized by processing of a storage control step.
A music content reception-control step which controls reception of a music content of a musical piece distributed from other information processors based on associated data of a musical piece transmitted by processing of a musical piece associated data transmission-control step.

[0012]This invention is characterized by the 2nd information processor comprising the following.
A music content memory measure which memorizes a music content of two or more musical pieces.
A musical piece associated data reception means which receives associated data of a musical piece from other information processors.
A music content search means to search a music content of a musical piece corresponding to associated data of a musical piece received by a musical piece associated data reception means among music contents of two or more musical pieces memorized by a music content memory measure.
A music content distribution means which distributes a music content of a musical piece searched by a music content search means to other information processors.

[0013]A portable information processing terminal can be included in an information processor besides the above.
[0014]Humming of a musical piece, music data of a musical piece, and words of a musical piece can be included in associated data of said musical piece.
[0015]From an information processor besides the above, can make a music content purchase request reception means which receives a purchase request of a music content of a musical piece establish further, and a music content search means, Associated data of said musical piece of a music content of a musical piece as which purchase was required by a purchase request reception means is searched, and the music content distribution means can distribute a music content of a musical piece as which purchase was required to other information processors.
[0016]This invention is characterized by the 2nd information processing method comprising the following.
A music content memory step which memorizes a music content of two or more musical pieces.
A musical piece associated data receiving step which receives associated data of a musical piece from other information processors.
A music content searching step which searches a music content of a musical piece corresponding to associated data of a musical piece received by processing of a musical piece associated data receiving step among music contents of two or more musical pieces memorized by processing of a music content memory step.
A music content distributing step which distributes a music content of a musical piece searched with processing of a music content searching step to other information processors.

[0017]This invention is characterized by a program of the 2nd recording medium comprising the following.
A music content storage control step which controls memory of a music content of two or more musical pieces.
A musical piece associated data reception-control step which controls reception of associated data of a musical piece from other information processors.
A music data search control step which controls search of a music content of a musical piece corresponding to associated data of a musical piece received by processing of a musical piece associated data reception-control step among music contents of two or more musical pieces memorized by processing of a music content storage control step.
A music content distribution control step which controls distribution to other information processors of a music content of a musical piece searched with processing of a music content search control step.

[0018]An input means as which, as for an information processing system of this invention, the 1st information processor inputs associated data of a musical piece, A musical piece associated data memory measure which memorizes associated data of a musical piece inputted by an input means, A musical piece associated data transmitting means which transmits associated data of a musical piece memorized by a memory measure to the 2nd information processor, Based on

associated data of a musical piece transmitted by musical piece associated data transmitting means, A music content memory measure is provided with a music content reception means which receives a music content of a musical piece distributed from the 2nd information processor, and the 2nd information processor remembers a music content of two or more musical pieces to be, A musical piece associated data reception means which receives associated data of a musical piece from the 1st information processor, A music content search means to search a music content of a musical piece corresponding to associated data of a musical piece received by a musical piece associated data reception means among music contents of two or more musical pieces memorized by a music content memory measure, It has a music content distribution means which distributes a music content of a musical piece searched by a music content search means to the 1st information processor.

[0019]A portable information processing terminal can be included in said 1st information processor.

[0020]Associated data of said musical piece can include humming of a musical piece, music data of a musical piece, and words of a musical piece.

[0021]Can make a purchase request means to require the purchase of a music content of a musical piece form in said 1st information processor further, and a musical piece associated data transmitting means, Transmit and pertinent information on a musical piece of a music content of a musical piece as which purchase was required by a purchase request means to the 2nd information processor. A purchase request reception means which receives a purchase request of a music content of a musical piece transmitted by associated data transmitting means of a musical piece of the 1st information processor can be made to be established further. Search a music data search means and a music content as which purchase was required by a purchase request reception means a music content distribution means, A music content of a musical piece as which purchase was required is distributed to the 1st information processor, and a music content as which purchase was required receives a music content reception means.

[0022]An information processing method of an information processing system of this invention, An input step into which an information processing method of the 1st information processor inputs associated data of a musical piece, A musical piece associated data memory step which memorizes associated data of a musical piece inputted by processing of an input step, A musical piece associated data transmission step which transmits associated data of a musical piece memorized by processing of a memory step to the 2nd information processor, Based on associated data of a musical piece transmitted by processing of a musical piece associated data transmission step, A music content memory step an information processing method of the 2nd information processor remembers a music content of two or more musical pieces to be including a music content receiving step which receives a music content of a musical piece distributed from the 2nd information processor, A musical piece associated data receiving step which receives associated data of a musical piece from the 1st information processor, Inside of a music content of two or more musical pieces memorized by processing of a music content memory step, A music content of a musical piece searched with processing of a music content searching step which searches a music content of a musical piece corresponding to associated data of a musical piece received by processing of a musical piece associated data receiving step, and a music content searching step, A music content distributing step distributed to the 1st information processor is included.

[0023]A program of a recording medium of an information processing system of this invention, An input control step by which a program which controls the 1st information processor controls an input of associated data of a musical piece, A musical piece associated data storage control step which controls memory of associated data of a musical piece inputted by processing of an input control step, A musical piece associated data transmission-control step which controls transmission to the 2nd information processor of associated data of a musical piece memorized by processing of a storage control step, Based on associated data of a musical piece transmitted by processing of a musical piece associated data transmission-control step, A music content reception-control step which controls reception of a music content of a musical piece distributed from the 2nd information processor is included, A music content storage control step

by which a program which controls the 2nd information processor controls memory of a music content of two or more musical pieces, A musical piece associated data reception-control step which controls reception of associated data of a musical piece from the 1st information processor, A music content search control step which controls search of a music content of a musical piece corresponding to associated data of a musical piece received by processing of a musical piece associated data reception-control step among music contents of two or more musical pieces memorized by processing of a music content storage control step, A music content distribution control step which controls distribution to the 1st information processor of a music content of a musical piece searched with processing of a music content search control step is included.

[0024]In a program of the 1st information processor of this invention, a method, and a recording medium, A music content of a musical piece to which associated data of a musical piece was inputted into, it memorized, and associated data of a memorized musical piece was transmitted to other information processors, and inputted associated data of a musical piece was distributed from other information processors based on transmitted associated data of a musical piece is received.

[0025]In a program of the 2nd information processor of this invention, a method, and a recording medium, A music content of two or more musical pieces is memorized, and associated data of a musical piece is received from other information processors, A music content of a musical piece corresponding to associated data of a musical piece received among music contents of two or more memorized musical pieces is searched, and a music content of a searched musical piece is distributed to other information processors.

[0026]In a program of an information processing system of this invention, a method, and a recording medium, Associated data of a musical piece is inputted by the 1st information processor, and inputted associated data of a musical piece is memorized by it, Associated data of a memorized musical piece is transmitted to the 2nd information processor, and it is received by music content of a musical piece distributed from the 2nd information processor based on transmitted associated data of a musical piece, and with the 2nd information processor. A music content of two or more musical pieces is memorized, and associated data of a musical piece is received from the 1st information processor, A music content of a musical piece corresponding to associated data of a musical piece received among music contents of two or more memorized musical pieces is searched, and a music content of a searched musical piece is distributed to the 1st information processor.

[0027]

[Embodiment of the Invention]Drawing 1 is a figure showing the composition of the 1 embodiment of the music distribution system concerning this invention. Portable telephones 1a thru/or 1d (hereafter, when these do not need to be distinguished here, the portable telephone 1 is only called.) other devices -- the same -- carrying out -- it being an ambulant radio station, for example, wireless connection being carried out to the base stations 2a thru/or 2d by the code division multiple access standard called W-CDMA (Wideband-Code Division Multiple Access), and, A 2-GHz frequency band can be used and large capacity data can be communicated with the data transfer rate of a maximum of 2 Mbps(es) at high speed. Thus, since the portable telephones 1a thru/or 1d can communicate large capacity data with a W-CDMA method at high speed, they can communicate the data which attains to varieties, such as transmission and reception of not only a voice call but an E-mail, and transmission and reception of the inspection of a simple homepage, a picture, and a music content.

[0028]The base stations 2a thru/or 2d are installed as a fixed-wireless-access office in the cell divided into the size of the request of the offer area of communications service, respectively. The base stations 2a thru/or 2d are connected to the public network 3 via the wire circuit. Many Internet 7, member wired terminals, computer networks which are not illustrated, etc. are connected to this public network 3.

[0029]The Internet Service Provider's access server 5 is also connected to the public network 3. The music distribution server 6 which this Internet Service Provider holds is connected to the access server 5.

[0030]The supervisory control device 4 is connected to a member wired terminal or the portable telephones 1a thru/or 1d via the public network 3, and authenticating processing, accounting, etc. to a member wired terminal or the portable telephones 1a thru/or 1d are performed.
[0031]The music distribution server 6 distributes the music content corresponding to the music distribution demand from the portable telephone 1 to the portable telephone 1 via the access server 5, the public network 3, and the base station 2. The music distribution server 6 searches a music content with the associated data of musical pieces, such as some of humming recorded in the music distribution demand from the portable telephone 1, and music data, from reception and its associated data, and distributes the music content which a user considers as a request to the portable telephone 1.
[0032]Two or more WWW (World Wide Web) servers 8a thru/or 8z are connected to the Internet 7, and transfer of data can do each mutually.
[0033]Next, the composition of the portable telephone 1 is explained with reference to drawing 2 and 3. Drawing 2 is an outline view of the portable telephone 1, and drawing 3 is a block diagram of the portable telephone 1.
[0034]Previously, the outline view shown in drawing 2 explains the appearance composition of the portable telephone 1. The antenna 11 transmits and receives an audio signal and a data signal by the base station 2 and an electric wave. The loudspeaker 12 outputs a call voice and it plays the music content which received distribution from the music distribution server 6. A number and the character input key 14 display the telephone number and character which were operated and inputted, and LCD(Liquid Crystal Display) 13 displays various kinds of processings with the music distribution server 6.
[0035]If it is pushed by the user and this function selection key 15 is pressed when various kinds of functions are used for the function selection key 15, the list of various kinds of functions will be displayed on LCD13. When various kinds of functions are used for the decision key 16, and determining the contents of processing, it is pressed by the user. The recording key 17 is a key operated by the user, when making a sound record, sound recording is started by the first depression and sound recording is ended by the following depression. That is, operation of a recording start and the end of sound recording is made by this recording key 17.
[0036]The power key 18 is a key which changes ON and OFF of the power supply of the portable telephone 1. The sound with which the microphone 19 is emitted by the user in the case of a telephone call is inputted. When the cursor keys 20a and 20b are moved by the cursor position displayed on LCD13, If the cursor displayed when it was operated by the user and the cursor key 20a was pressed moves to above [of LCD13] and the cursor key 20b is pressed, the displayed cursor will move to down [of LCD13].
[0037]The telephone call button 21 is a key pressed when a telephone call is started by the user. The telephone call end button 22 is a key pressed when a telephone call is closed by the user.
[0038]Next, the composition of the inside is explained based on the block diagram of the portable telephone 1 of drawing 3. The same numerals are attached about the portion corresponding to drawing 2, and the explanation is omitted suitably.
[0039]The final controlling element 31 is connected to the bus 32, and A number and the character input key 14, the function selection key 15, the decision key 16, the recording key 17, the power key 18, the cursor keys 20a and 20b, The signal inputted from the telephone call button 21 and the telephone call end button 22 is outputted to CPU(Central Processing Unit) 35.

[0040]The communications department 33 transmits to CPU35 the download data of a voice call signal, a music content, etc. which is controlled by CPU35 and received from the antenna 11 via the base station 2, and. The associated data etc. of the musical piece which requires distribution of the music distribution server 6 are outputted to the base station 2 via the antenna 11.
[0041]DSP(Digital Signal Processor) 34 is controlled by CPU35, changes into the audio signal of an analog the music content received via the communications department 33 from a digital signal, and is made to output it as a sound from the loudspeaker 12. From the microphone 19, the audio (humming and music) analog signal inputted on the occasion of sound recording is changed into a digital signal, and it outputs to the memory 36 or the communications department

[0042]CPU35 is controlling the whole operation of the portable telephone 1, and performs various kinds of processings based on the signal inputted from the final controlling element 31.
[0043]Next, the composition of the music distribution server 6 is explained with reference to drawing 4.
[0044]CPU51 is controlling operation of the whole music distribution server 6, reads suitably into RAM52 the program memorized by ROM53 connected via the main bus 60, and executes it. If the distribution request of a music content is received from the portable telephone 1 via the access server 5 or the Internet 7 from the communications department 59, CPU51, Recognize some of the associated data of a musical piece in which the distribution was demanded, i.e., recorded humming, music, and words of the musical piece, and, in the case of a sound (humming and music), by frequency analysis, a rhythm, etc. It compares with the music content currently recorded on HDD54, an applicable music content (music data) is searched, and it transmits to the portable telephone 1 via the communications department 59.
[0045]CPU51 compares the certification information transmitted from each portable telephone 1 with the certification information beforehand registered into HDD54, and performs authenticating processing. The magnetic disk 211, the optical disc 212, the magneto-optical disc 213 by which the drive 201 connected to the main bus 60 was equipped with CPU51, Or read into RAM52 suitably the program recorded on the semiconductor memory 214, and it is executed, and various kinds of data is written in them if needed.
[0046]CRT(Cathode Ray Tube) 55 is controlled by CPU51, and displays the information inputted from the keyboard 57 and the mouse 58 via the I/O (Input/Output) interface 56, various kinds of processing results, etc.
[0047]The communications department 59 comprises a modem etc., is controlled by CPU51, and delivers and receives the portable telephone 1, WWW server 8, etc. and data via the Internet 7 or the access server 5.
[0048]Next, operation of the portable telephone 1 is explained with reference to the flow chart of drawing 5.
[0049]As for the portable telephone 1, the power key 18 is pressed, if a power supply is made one, processing will be started, and in Step S1, CPU35 displays a default window (not shown) on LCD13. In Step S2, when it judges whether CPU35 has mail arrival and judges with there being no mail arrival, the processing progresses to Step S3.
[0050]In Step S3, CPU35 judges whether the function selection key 15 was pressed. In Step S3, when judged with the function selection key 15 not being pressed, the processing returns to Step S1. That is, after a power supply is made one, when there is no mail arrival and the function selection key 15 is not pressed, the processing repeats and awaits Steps S1 thru/or S3, and serves as as [state].
[0051]In Step S3, when judged with the function selection key 15 having been pressed, in step S4, CPU35 displays the function selection screen 71 shown in drawing 6 (A) on LCD13. A "telephone call", "sound recording", "playback", a "words input", "a words check", "transmission", a "audition", and "purchase" are displayed on the function selection screen 71. Each item of a "telephone call", "sound recording", "playback", a "words input", "a words check", "transmission", a "audition", and "purchase", Where it moved the reversing display part 72 up and down by the cursor keys 20a and 20b and the reversing display part 72 is located in the position of a desired function, it can choose by carrying out the depression of the decision key 16. Operation and its processing of a "telephone call", "sound recording", "playback", a "words input", "a words check", "transmission", a "audition", and "purchase" are mentioned later.
[0052]In Step S5, CPU35 judges whether the "telephone call" was chosen. For example, when the decision key 16 is pressed where the reversing display part 72 is located in a "telephone call" as shown in drawing 6 (A), CPU35 judges with the "telephone call" having been chosen and the processing progresses to Step S6. In Step S6, CPU35 performs dispatch call processing.
[0053]Here, dispatch call processing is explained with reference to the flow chart of drawing 7. In Step S31, CPU35 displays a telephone call screen as shown in drawing 6 (B) LCD13. The

telephone number display column 73 is formed, and a user operates a number and the character input key 14 in a telephone call screen, and inputs a desired telephone number into it.
[0054]In Step S32, CPU35 judges whether the number was inputted and the telephone call button 21 was pushed, and it repeats this processing until the telephone call button 21 is pushed. As shown in drawing 6 (B), in Step S32 to the telephone number display column 73. Where "0123456789" is inputted, if the telephone call button 21 is pushed, a number will be inputted, CPU35 will judge with the telephone call button 21 having been pushed, and the processing will progress to Step S33.
[0055]In Step S33, CPU35 controls the communications department 33 and makes it a talk state to the partner point of the telephone number inputted into the telephone number display column 73.
[0056]In Step S34, CPU35 repeats this processing until it judges whether the telephone call end button 22 was pushed and the telephone call end button 22 is pushed by the user. In Step S34, when judged with the telephone call end button 22 having been pushed, the processing progresses to Step S35. In Step S35, CPU35 controls the communications department 33 and terminates dispatch call processing.
[0057]Here, it returns to explanation of the flow chart of drawing 5.
[0058]After processing of Step S6 is ended, the processing returns to step S4.
[0059]In Step S5, when judged with a "telephone call" not having been chosen, in Step S7, CPU35 judges whether "sound recording" was chosen. For example, if the decision key 16 is pushed on the position of the "sound recording" on the function selection screen 71 where the reversing display part 72 is located as shown in drawing 8 (A), CPU35 will judge with "sound recording" having been chosen and the processing will progress to Step S8.
[0060]In Step S8, CPU35 performs sound recording processing.
[0061]Here, sound recording processing is explained with reference to the flow chart of drawing 9.
[0062]In Step S41, CPU35 displays the sound recording screen 81 as shown in drawing 8 (B) LCD13. "It returns" is displayed on the sound recording screen 81, and since the choice is this "returning", the reversing display part 72 is in the state where it was located in "returning."
[0063]In Step S42, when CPU35 judges whether the recording key 17 was pressed and it is judged with the recording key 17 having been pressed, the processing progresses to Step S43.
[0064]In Step S43, further, CPU35 controls DSP34, transforms the audio signal of an analog inputted from the microphone 19 to a digital signal, and the memory 36 is made to memorize, and as shown in drawing 8 (C), it displays the sound recording screen 82. "Music 1 06 / 01 10:30", and "Now Recording" are displayed, record is started at 10:30 on June 1 by the file called "music 1", and it is shown in the sound recording screen 82 now that it is in a sound recording state. in addition — this file name is what is assigned automatically -- the next sound recording -- "the music 2" — further, to that next sound recording, it is assigned with "the music 3" and the recording start time at that time is attached.
[0065]In Step S44, CPU35 repeats this processing until it judges whether the recording key 17 was pressed and the recording key 17 is pressed. That is, CPU35 is in a sound recording state, and it continues recording the sound from the microphone 19 until the recording key 17 is pressed. In Step S44, when it judges with the recording key 17 having been pressed (i.e., when the end of sound recording is inputted), the processing progresses to Step S45.
[0066]In Step S45, CPU35 controls microphone 19 and DSP34, sound recording is terminated, and the processing returns to Step S41. That is, a sound recording screen as shown in drawing 8 (B) is again displayed on LCD13.
[0067]In Step S42, when judged with CPU35 judging whether "it returns" was chosen, and not being chosen in Step S46 although it returns when it judges with the recording key 42 not being pressed, the processing returns to Step S41. Namely, where the sound recording screen 81 is displayed on LCD13, when the recording key 17 is not pressed and "it returns" is not chosen, as for the processing, processing of Step S41, S42, and S46 is repeated. In Step S46, if the decision key 16 is pressed and "it returns" is chosen in the state where it is shown in drawing 8 (B), CPU35 will judge with "it returns" having been chosen and processing of sound recording will be

ended.
[0068]By this processing, a user inputs the associated data for specifying the musical piece which is going to receive distribution of a music content. That is, when a musical piece [is walking all over the town and] to expect purchase of by this sound recording processing is recorded or the user itself plays humming of that musical piece, the associated data (recorded data) of the musical piece which wishes to distribute will be generated to recording it. This associated data is transmitted to the music distribution server 6 by the transmitting processing mentioned later. The processing is mentioned later.
[0069]Here, it returns to explanation of the flow chart of drawing 5.
[0070]After sound recording processing of Step S8 is ended, the processing returns to step S4.
[0071]In Step S7, when judged with sound recording not having been chosen, in step S9, CPU35 judges whether "playback" was chosen or not. For example, if the decision key 16 is pushed on "reproduction" of the selection picture 71 where the reversing display part 72 is located as shown in drawing 10 (A), CPU35 will judge with "reproduction" having been chosen and the processing will progress to Step S10.
[0072]In Step S10, CPU35 performs regeneration.
[0073]Here, regeneration is explained with reference to the flow chart of drawing 11.
[0074]In Step S51, CPU35 reads the recorded data memorized by the memory 36, and as shown in drawing 10 (B), it displays the reproduction screen 91 on LCD13. The table of the file name is displayed on the reproduction screen 91. In now, three files, "music 1 06 / 02 21:30", "music 2 06/03 11:20", and "music 3 06/04 10:30", are displayed. By moving the reversing display part 72 up and down by operating the cursor keys 20a and 20b, where the reversing display part 72 is located in a desired file, if the depression of the decision key 16 is carried out, a file can be chosen.
[0075]In Step S52, CPU35 judges whether one on the reproduction screen 91 of recorded data was chosen. For example, in the state where it is shown in drawing 10 (B), if the decision key 17 is pressed, CPU35 will judge with the file of the music 3 having been chosen, and the processing will progress to Step S53.
[0076]In Step S53, CPU35 reads the music data of the file of the music 3 from the memory 36, controls DSP34, makes it selected recorded data, i.e., the case of now, play, and it is made to output to the loudspeaker 12, and it displays the reproduction screen 92 on LCD13. "Music 306 / 04 10:30" are displayed on the reproduction screen 92 as a file name played now, and "Now Playing" which shows that it is under playback now is displayed.
[0077]In Step S54, CPU35 repeats this processing until it judges whether the contents of reproduction were completed and reproduction is ended. In Step S54, when judged with reproduction having been completed, in Step S55, CPU35 controls DSP34 and the loudspeaker 12, reproduction is terminated, and the processing returns to Step S51.
[0078]In Step S52, when neither of recorded data is chosen, in Step S56, CPU35 judges whether "it returns" was chosen, and when it judges with "it returns" not being chosen, the processing returns to Step S51. That is, where the reproduction screen 91 is displayed on LCD13, when there is no alter operation from a user, regeneration repeats processing of Step S51, S52, and S56.
[0079]In Step S56, when judged with "it returns" having been chosen, regeneration is ended.
[0080]By this regeneration, the user can check the associated data for specifying a musical piece.
[0081]Here, it returns to explanation of the flow chart of drawing 5.
[0082]In Step S10, after regeneration is ended, the processing returns to step S4.
[0083]When judged with reproduction not having been chosen in step S9, in Step S11 CPU35, If the decision key 16 is pressed where the reversing display part 72 is located in a "words input" as it judges whether the "words input" was chosen, for example, is shown in drawing 12 (A), it will be judged with the "words input" having been chosen and the processing will progress to Step S12.
[0084]In Step S12, CPU35 performs a words input process.
[0085]Here, a words input process is explained with reference to the flow chart of drawing 13.

[0086]In Step S61, CPU35 displays the words input screen 101, as shown in drawing 12 (B). "Words 1 06 / 01 21:30" are displayed on the words input screen 101 as a file name of the words under present input, and it is shown in it that the file of the words registered as "the words 1" is a file inputted into 21:30 on June 1. The words input column 102 is displayed on the words input screen 101, it is displayed by the cursor 102a, and a user, When a number and the character input key 14 can be operated, some words of the musical piece which wishes distribution of a music content can be inputted and an input is completed, the words which inputted the decision key 16 by carrying out a depression can be made to register.
[0087]In Step S62, CPU35 repeats this processing until the decision key 16 judges whether the decision key 16 was pressed and the decision key 16 is pressed. In [it is judged with the decision key 16 having been pressed, when the decision key 16 was pressed in Step S62 where "a red apple" is inputted as shown in drawing 12 (B), and] Step S63, CPU35 makes the memory 36 memorize the inputted words, and it changes the display screen of LCD13 to the function selection screen 71.
[0088]By this processing, a user will generate the associated data for specifying the musical piece which is going to receive distribution of a music content like the above-mentioned sound recording processing.
[0089]Here, it returns to explanation of the flow chart of drawing 5.
[0090]After the words input process of Step S12 is ended, the processing returns to step S4.
[0091]In Step S11, when judged with the "words input" not being chosen, in Step S13, it is judged whether "the words check" was chosen. For example, if the decision key 16 is pressed where the reversing display part 72 is located in "a words check" as shown in drawing 14 (A), CPU35 will judge with "the words check" having been chosen and the processing will progress to Step S14.
[0092]In Step S14, CPU35 performs words confirming processing.
[0093]Here, words confirming processing is explained with reference to the flow chart of drawing 15.
[0094]In Step S71, CPU35 reads the words (data) memorized by the memory 36, and as shown in drawing 14 (B), it displays the words confirmation screen 111 on LCD13. The table of the file name of words is displayed on the words confirmation screen 111. In now, three files, "words 1 06 / 02 21:20", "words 2 06/03 12:20", and "words 3 06/04 13:30", are displayed. By moving the reversing display part 72 up and down by operating the cursor keys 20a and 20b, in the state where you made it located in a desired file, if the depression of the decision key 16 is carried out, a file can be chosen.
[0095]In Step S72, CPU35 judges whether one on the words confirmation screen 111 of words was chosen. For example, in the state where it is shown in drawing 14 (B), if the decision key 17 is pressed, it will be judged with the file of the words 1 having been chosen, and the processing will progress to Step S73.
[0096]CPU35 reads the words of the file of the words 1 from the memory 36, and is made for selected words, i.e., the case of now, to display them on LCD13 in Step S73, as shown in the words confirmation screen 112. "Words 1 06 / 02 21:20" are displayed on the words confirmation screen 112 as read words, and the "red apple" in which the registered words are shown is displayed.
[0097]In Step S74, CPU35 judges whether "it returns" of the words confirmation screen 112 was chosen, and it repeats this processing until it is ended. In Step S74, if the decision key 16 is pressed where [which a user operates the cursor keys 20a and 20b, and is shown in drawing 14 (C)] the reversing display part 72 is located in "returning", CPU35 will judge with "having returned" having been determined and the processing will return to Step S71.
[0098]in Step S72 -- any of words -- although -- when judged with not being chosen, in Step S75, CPU35 judges whether "it returns" of the words confirmation screen 111 was chosen, and when judged with "it returns" not being chosen, the processing returns to Step S71. That is, where the words confirmation screen 111 is displayed, when there is no alter operation from a user, words confirming processing repeats processing of Step S71, S72, and S75.
[0099]In Step S75, when judged with "it returns" having been chosen, regeneration is ended.

[0100]Here, it returns to explanation of the flow chart of drawing 5.
[0101]In Step S14, after words confirming processing is ended, the processing returns to step S4.
[0102]In Step S13, when judged with a words check not having been chosen, in Step S15, CPU35 judges whether transmitting processing was chosen. For example, if the decision key 16 is pushed on "transmission" in the state where the reversing display part 72 was located as shown in drawing 16 (A), CPU35 will judge with "transmission" having been chosen and the processing will progress to Step S16.
[0103]In Step S16, CPU35 performs transmitting processing.
[0104]Here, transmitting processing is explained with reference to the flow chart of drawing 17.
[0105]In Step S81, CPU35 reads the music/lyrics data memorized by the memory 36, and as shown in drawing 16 (B), it displays music / words selection picture 121 on LCD13. The table of the file name of the words/music data memorized by the memory 36 is shown in music / words selection picture 121 by drawing 16 (B). In now, in music / words selection picture 121 "Music 1 06 / 02 21:30", It indicates "music 2 06/0311:20", "music 3 06/04 10:30", "words 1 06/02 21:20", "words 2 06/03 12:20", "words 3 06/04 13:30", "raw sound recording", and "it returns."
[0106]In Step S82, CPU35 judges whether one of data was chosen. For example, in [if the decision key 16 is pressed where the reversing display part 72 is located in "music 106 / 02 21:30" as shown in drawing 16 (B)] Step S82, CPU35 judges with "music 1 06 / 02 21:30" having been chosen, and the processing progresses to Step S83.
[0107]In Step S83, CPU35 displays the transmitting site selection picture 122 on LCD35. In now, "MUSIC SITE", "SOUND CLUB", and "BEST HIT" are displayed on the transmitting site selection picture 122 shown in drawing 16 (C) as a name of the registered selectable site (music distribution server 6). Therefore, the music distribution server 6 will exist in plurality actually.
[0108]In Step S84, CPU35 judges whether one of transmitting sites was chosen. For example, if the decision key 16 is pressed where the reversing display part 72 is located in "MUSIC SITE" as shown in drawing 16 (C), CPU35 will judge with "MUSIC SITE" having been chosen and the processing will progress to Step S85.
[0109]In Step S85, CPU35 controls the communications department 33 and transmits the notice which requires connection with certification information (a user's certification information used now) to the selected music distribution server 6.
[0110]Here, with reference to the flow chart of drawing 18, the reception of the associated data of the music distribution server 6 is explained. In now, the music distribution server 6 is a server managed by the entrepreneur of "MUSIC SITE."
[0111]In Step S101, CPU51 judges whether it is mail arrival whereabouts no, and it repeats the processing until there is mail arrival. For example, since transmitting processing of the portable telephone 1 will receive a connection request in now, it judges with CPU51 having mail arrival, and the processing progresses to Step S102.
[0112]In Step S102, CPU51 controls the communications department 59 and compares the certification information which received certification information and was received with the connection request from the portable telephone 1, and the certification information beforehand memorized by HDD54.
[0113]In Step S104, CPU51 judges whether the certification information beforehand remembered to be the certification information received from the portable telephone 1 is in agreement. For example, when certification information is in agreement, it judges with the certification information of CPU51 from the portable telephone 1 corresponding, and the processing progresses to Step S105.
[0114]In Step S105, it notifies the portable telephone 1 that certification information of CPU51 corresponded, and communication with the portable telephone 1 is connected.
[0115]Corresponding to this processing, as for the portable telephone 1, CPU35 receives the notice of the collated result of the certification information from the music distribution server 6 in Step S86 of the flow chart of drawing 17. In Step S87, CPU35 judges whether certification information was in agreement from the collated result of the received certification information. Since the notice that the certification information transmitted from the portable telephone 1 and

the certification information beforehand registered into the music distribution server 6 were in agreement in now will be received, it judges with certification information of CPU35 having corresponded, and the processing progresses to Step S88.
[0116]In Step S88, CPU51 transmits the file of "music 1 06 / 02 21:30", and the data which controlled the communications department 33 and was chosen as the music distribution server 6, i.e., the case of now, displays the transmitting screen 123 as shown in drawing 16 (D) LCD13. It is displayed on the transmitting screen 123 as a file name transmitted now that "MUSIC SITE" is specified as "music 1 06 / 02 21:30", and a transmission destination, and "Now Sending" which shows that it is under transmission now is displayed.
[0117]CPU51 of the music distribution server 6 receives the data (data of "music 1 06 / 02 21:30") transmitted from the portable telephone 1 via the communications department 59, and HDD54 is made to memorize it in Step S106 of the flow chart of drawing 18 here.
[0118]In Step S89 of the flow chart of drawing 17, CPU35 of the portable telephone 1 judges whether transmission of selected music data was completed, and it repeats this processing until transmission is completed. In Step S89, when judged with having judged with transmission having been completed, in Step S90, CPU35 controls the communications department 33 and transmits the notice of the completion of transmitting to the music distribution server 6.
[0119]Corresponding to this, in Step S107 of the flow chart of drawing 18, CPU51 of the music distribution server 6 judges whether the notice of the completion of transmitting from the portable telephone 1 was received, and it repeats the processing until the notice of the completion of transmitting is received. If the notice of the completion of transmitting is received, in Step S108, CPU51 will cut communication with the portable telephone 1.
[0120]In Step S82 (drawing 17), when one of data is not chosen, in Step S92, CPU35 judges whether "it returns" was chosen, and when it judges with "it returns" not having been chosen, the processing returns to Step S81. That is, CPU35 repeats processing of Step S81, S82, and S92, and continues displaying music / words selection picture 121 on LCD13 in the meantime until one of data is chosen.
[0121]In Step S92, when "it returns" is chosen, CPU35 ends transmitting processing.
[0122]In Step S84, when one of transmitting sites is not chosen, in Step S93 CPU35, When it judges whether "it returns" was chosen and is judged with "it returns" not having been chosen, the processing returns to processing of Step S83, and when "it returns" is chosen, the processing returns to Step S81.
[0123]When CPU51 of the music distribution server 6 judges with certification information not being in agreement in Step S104 of the flow chart of drawing 18, in Step S109 CPU51, It transmits that control the communications department 59 and certification information is not in agreement with what was registered beforehand to the portable telephone 1.
[0124]According to this, it judges with the authentication result of CPU35 of the portable telephone 1 from a transmitting site not having corresponded in Step S87 of the flow chart of drawing 17, and the processing progresses to Step S94. In Step S94, it displays on LCD13 that certification information was not in agreement (not shown).
[0125]After the reception of associated data is completed, CPU51 of the music distribution server 6 performs retrieval processing of the music content of which the user expects distribution from the received pertinent information (in the case of now music data).
[0126]Here, with reference to the flow chart of drawing 19, the music content retrieval processing of the music distribution server 6 is explained. In Step S121, CPU51 analyzes the associated data of the musical piece which received from the portable telephone 1, and searches the candidate of a musical piece who wishes to distribute. Since music data is received in now, the received music data is analyzed and the candidate of a musical piece applicable from a pitch, a rhythm, etc. is searched. When associated data is words, CPU51 searches the musical piece which contains the words among the musical pieces currently recorded on HDD54.
[0127]In Step S122, CPU51 controls the communications department 59 and connects communication with the portable telephone 1 again. Since it is already confirmed about certification information at this time, connection is started as it is.
[0128]Since the portable telephone 1 will receive the arrival from the music distribution server 6

at this time, in Step S2 of the flow chart of drawing 5, it judges with CPU35 of the portable telephone 1 having mail arrival, and it is judged in Step S17 whether it is a telephone call. In now, the received data from the music distribution server 6 are transmitted, and since it is not a telephone call, the processing progresses to Step S18.
[0129]CPU35 performs data receiving processing in Step S18.
[0130]Here, data receiving processing is explained with reference to the flow chart of drawing 20.

[0131]In Step S131, CPU35 of the portable telephone 1 controls the communications department 33, and connects communication with the music distribution server 6.
[0132]At this time, in Step S123 (drawing 19), CPU51 of the music distribution server 6 controls the communications department 59, and transmits the title of the musical piece considered to wish to distribute, an artist name, the music content for viewing and listening, etc. to the portable telephone 1 based on search results.
[0133]The music content of the musical piece which serves as a candidate which CPU35 of the portable telephone 1 controlled the communications department 33 in Step S132 (drawing 18) in response, and has been transmitted from the music distribution server 6 is received, and as shown in drawing 21, the receiving screen 131 is displayed on LCD13. As a file name which shows the receiving screen 131 whether the candidate of a musical piece who has received now is based on the file of which music data, "Now Receiving" which "From MUSIC SITE" which indicates transmitting agencies to be "music 1 06 / 02 21:30" is shown, and shows further that it is under reception now is displayed.
[0134]In Step S124 (drawing 19), CPU51 of the music distribution server 6 controls the communications department 59, and cuts communication with the portable telephone 1. According to this, in Step S133 (drawing 20), CPU35 of the portable telephone 1 controls the communications department 33, and cuts communication with the music distribution server 6.
[0135]Here, it returns to explanation of the flow chart of drawing 5.
[0136]In Step S15, when judged with transmission not having been chosen, in Step S19, CPU35 judges whether the audition was chosen or not. For example, if the decision key 16 is pressed where the reversing display part 72 on the function selection screen 71 is located in a "audition" as shown in drawing 22 (A), it will judge with the "audition" having been chosen and the processing will progress to Step S20.
[0137]In Step S20, CPU35 performs audition processing.
[0138]Here, audition processing is explained with reference to the flow chart of drawing 23.
[0139]In Step S141, CPU35 reads the search results of the musical piece memorized by the memory 36, and as shown in drawing 22 (B), it displays the audition screen 141 on LCD13. The table of the musical piece which wishes to purchase is displayed on the words confirmation screen 141, In now, he is the "candidate 1. Artist 1 Red apple", "candidate 2 artist 2 apple Oiwake", and three candidates of "flower of candidate 3 artist 3 apple" ** are displayed, and the name of an artist name and a musical piece is displayed, respectively. The user can choose a musical piece to try listening by moving the reversing display part 72 up and down by operating the cursor keys 20a and 20b. It may be made for the information on the musical piece displayed on this LCD13 to display the album name etc. on which other information may be sufficient, for example, that music is recorded.
[0140]In Step S142, CPU35 judges whether one on the audition screen 141 of candidates was chosen. if the decision key 17 is pressed in the state where it is shown in drawing 22 (B) -- "-- the candidate 1 artist 1 -- it is judged with red apple" having been chosen and the processing progresses to Step S143.
[0141]The musical piece as which CPU35 was chosen in Step S143, i.e., the case of now, is the "candidate 1. Artist 1 The music data of red apple" is read from the memory 36, "candidate 1 who control DSP34, and it is made to output to the loudspeaker 12, and shows the musical piece under present audition to the audition screen 112 Artist 1 Red apple" is displayed and "Now Playing" which shows that the music for the present audition is played is displayed.
[0142]In Step S144, this processing is repeated until it judges whether playback of the music for viewing and listening ended CPU35 and playback is ended, and if judged with playback having

been ended, that processing will return to Step S141.
[0143]In Step S142, when neither of the candidates is chosen, and CPU35 judges whether "it returns" was chosen in Step S145 and it is judged with "it returns" not being chosen, the processing returns to Step S141. That is, where the audition screen 141 is displayed, when there is no alter operation from a user, words confirming processing repeats processing of Step S141, S142, and S145.
[0144]In Step S145, when judged with "it returns" having been chosen, audition processing is ended.
[0145]The music content for viewing and listening is a music content which can play a part of music actually distributed.
[0146]Here, it returns to explanation of the flow chart of drawing 5.
[0147]In Step S20, after audition processing is ended, the processing returns to step S4.
[0148]In Step S19, when judged with a "audition" not having been chosen, in Step S21, CPU35 judges whether "purchase" was chosen or not. For example, if the decision key 17 is pushed on "purchase" on the function selection screen 71 where the reversing display part 72 is located as shown in drawing 24 (A), CPU35 will judge with "purchase" having been chosen and the processing will progress to Step S22.
[0149]In Step S22, CPU35 performs purchase processing.
[0150]Here, purchase processing is explained with reference to the flow chart of drawing 25.
[0151]In Step S151, CPU35 reads a list of the candidate of a musical piece who wishes purchase memorized by the memory 36, and as shown in drawing 24 (B), it displays the purchase screen 151 on LCD13. As shown in drawing 24 (B), the table of the musical piece which serves as a candidate remembered by the memory 36 is displayed on the purchase screen 151. In now, in the purchase screen 151, he is the "candidate 1. Artist 1 It indicates red apple", "candidate 2 artist 2 apple Oiwake", "the flower of candidate 3 artist 3 apple", and "it returns."
[0152]In Step S152, CPU35 judges whether one on the purchase screen 151 of candidates was chosen. if the decision key 17 is pressed in the state where it is shown in drawing 24 (B) -- "-- the candidate 1 artist 1 -- it is judged with red apple" having been chosen and the processing progresses to Step S153.
[0153]In Step S153, CPU35 controls the communications department 33 and transmits a user's certification information to the music distribution server 6 with the notice which tells wishing to purchase.
[0154]Here, with reference to the flow chart of drawing 26, the message distribution processing of the music content of the music distribution server 6 is explained.
[0155]In Step S181, CPU51 judges whether there is any mail arrival. It is judged with there being mail arrival, and since the notice which wishes a music distribution from the portable telephone 1 will be received in now, in Step S182, the communications department 59 is controlled, and CPU51 receives the information on the musical piece which wishes the purchase (distribution) from the portable telephone 1, and it receives certification information.
[0156]CPU51 compares with the received certification information and the certification information beforehand registered into HDD54 in Step S183. In Step S184, it judges whether the received certification information of CPU51 corresponded with the certification information registered beforehand, and when it judges with it having been in agreement, the processing progresses to Step S185.
[0157]In Step S185, it notifies the portable telephone 1 that the received certification information of CPU51 corresponded with the certification information registered beforehand, and communication with the portable telephone 1 is connected.
[0158]At this time, CPU35 of the portable telephone 1 receives the authentication result from a transmitting site (music distribution server 6) via the communications department 33 in Step S154 of the flow chart of drawing 25. In Step S155, it judges whether the certification information of CPU35 which the notice which received transmitted corresponded with the certification information registered beforehand, and when judging with certification information having been in agreement, the processing progresses to Step S156.
[0159]In Step S156, CPU35 controls the communications department 33 and connects with the

music distribution server 6. "candidate 1 who CPU35 controlled the communications department 33 and was chosen in Step S157 Artist 1 The notice which wishes the purchase of red apple" is transmitted to the music distribution server 6.

[0160]At this time, CPU51 of the music distribution server 6 receives the information on the musical piece which wishes purchase by which CPU51 was received from the portable telephone 1 via the communications department 59 in Step S186 of the flow chart of drawing 26. In now, he is the "candidate 1. Artist 1 The notice which wishes the purchase of red apple" is received.

[0161]In Step S187, CPU51 reads the music content of the musical piece which wishes to purchase from HDD54, and controls the communications department 59 and transmits the accounting information of the musical piece to the portable telephone 1.

[0162]Here, in Step S158 of the flow chart of drawing 25, CPU35 of the portable telephone 1 receives the accounting information transmitted from the music distribution server 6, and as shown in drawing 24 (C), it displays the purchase screen 152 for the accounting information. the purchase screen 152 — "— the candidate 1 artist 1 — the title of the musical piece purchased as red apple" (it distributes) is displayed — the bottom of it — as fee collection (price to a musical piece) — "— fee collection 300 yen" is displayed. Furthermore, below the credit card number input column 152a is displayed, and a user can input now into it by operating a number and the character input key 14.

[0163]As CPU35 is shown in drawing 24 (C) in Step S159, for example, it is in the state where the user's credit card number was inputted into the credit card number input column 152a as shown in "11223344", A push on the decision key 17 will transmit this to the music distribution server 6 as a response of billing data.

[0164]At this time, CPU51 of the music distribution server 6 receives the response indication of the accounting information from the portable telephone 1 in Step S188 of the flow chart of drawing 26.

[0165]In Step S189, CPU51 judges (whether there is any injustice in a card number) for whether the accounting information transmitted from the portable telephone 1 is that satisfactory. For example, when judged with there being no problem in the response of accounting information, in Step S190, CPU51 notifies the portable telephone 1 that there is no problem in accounting information, and it downloads music data to the portable telephone 1. That is, in now, he is the "candidate 1. Artist 1 The music data of red apple" will be transmitted to the portable telephone 1.

[0166]At this time, CPU35 of the portable telephone 1 receives the notice of the processing result of fee collection from the music distribution server 6 in Step S160 of the flow chart of drawing 25. In Step S161, CPU35 judges whether there was any problem in the notice of accounting information. When it is judged with there being no problem in accounting information as mentioned above in now, in Step S162 CPU35, Download the music data distributed from the music distribution server 6, and make the memory 36 memorize, and. He is the "candidate 1 as shown in drawing 24 (D) LCD13. Artist 1 The red music data of apple" displays "Now Buying" which shows what is downloaded now (purchased).

[0167]In Step S163, CPU35 repeats the processing until it judges whether download was completed or not and download is completed. For example, when judged with download having been completed, in Step S164, CPU35 transmits the terminating notice of download to the music distribution server 6.

[0168]When it judges with CPU51 of the music distribution server 6 judging whether the terminating notice of download was received, and not being received in Step S191 at this time, processing of Step S190 is repeated until it receives a terminating notice. Since the terminating notice of download is transmitted from the portable telephone 1 in now, it is judged with the download terminating notice being received, and in Step S192 CPU51, The communications department 59 is controlled, communication with the portable telephone 1 is cut, and the processing returns to processing of Step S181.

[0169]Here, CPU35 of the portable telephone 1 controls the communications department 33, and makes communication with the music distribution server 6 cut in Step S165 of the flow chart of drawing 25, and the processing returns to Step S151.

[0170]In Step S152, when one of data is not chosen, in Step S166, CPU35 judges whether "it returns" was chosen. "although it returns, when it judges with not being chosen, the processing returns to Step S151. That is, where the purchase screen 151 is displayed, when there is no input from a user, the processing repeats processing of Step S151, S152, and S166.
[0171]In Step S166, when "it returns" is chosen, the processing is ended.
[0172]In Step S184 of the flow chart of drawing 26, when judged with certification information not being in agreement, in Step S193, CPU51 of the music distribution server 6 notifies the portable telephone 1 that certification information is not in agreement.
[0173]In response, it is judged with certification information's CPU35 of the portable telephone 1 not corresponding in Step S155 of the flow chart of drawing 25, and CPU35 displays on LCD13 the screen (not shown) in which it is shown that certification information is not in agreement in S167.
[0174]In Step S189 of the flow chart of drawing 26, when judged with there being a problem in accounting information, in Step S194, CPU51 controls the communications department 59 and notifies the portable telephone 1 that accounting information is improper.
[0175]In response in Step S161, accounting information is judged as there being a problem, and CPU35 of the portable telephone 1 displays on LCD13 the screen (not shown) in which it is shown that accounting information is improper in Step S168.
[0176]Here, it returns to explanation of the flow chart of drawing 5.
[0177]In Step S22, after purchase processing is completed, the processing returns to step S4.
[0178]In Step S23, CPU35 is in the state where the function selection screen 71 is displayed on LCD13, and when it judges whether predetermined time passed and predetermined time has not passed, the processing returns to step S4. When predetermined time passes, the processing returns to Step S1.
[0179]In Step S17, when mail arrival is a telephone call, the processing progresses to Step S24.
[0180]In Step S24, CPU35 performs mail arrival call processing.
[0181]Here, mail arrival call processing is explained with reference to the flow chart of drawing 27.
[0182]In Step S201, CPU35 controls the communications department 33, and makes it a talk state, and it displays a telephone call screen as shown in drawing 6 (B) LCD13. However, a connected line identification is displayed on the telephone number display column 73 at the time of mail arrival call processing.
[0183]In Step S202, CPU35 judges whether the telephone call end button 22 was pushed, and it repeats this processing until the telephone call end button 22 is pushed. When the telephone call end button 22 is pushed, in Step S203, CPU35 controls the communications department 33 and terminates a talk state.
[0184]Next, with reference to the flow chart (timing chart) of drawing 28, the processing in which the portable telephone 1 receives distribution of a music content from the music distribution server 6 is explained. In the flow chart of drawing 28, the timing by which processing of the above-mentioned explanation of operation is started is shown. Or since the processing is as above-mentioned, it omits explanation about each operation and mainly explains timing of operation.
[0185]In Step S211, the portable telephone 1 performs sound recording processing, and records humming etc. which are played by the music which is flowing all over the town etc. as associated data of the musical piece in which a user wants to receive distribution of a music content, or the user himself. It may be made to input some words of the musical piece which wishes to distribute by a words input process instead of sound recording processing.
[0186]In Step S212, the portable telephone 1 transmits the associated data of the musical piece recorded by the above-mentioned processing to the music distribution server 6.
[0187]At this time, the music distribution server 6 receives the associated data recorded by the reception of associated data in Step S221.
[0188]In Step S222, the music distribution server 6, The associated data of the musical piece which received is analyzed and it asks for a voice pattern, a rhythm, etc., and based on this, out of the music content of the musical piece currently recorded on HDD54, the music content of

the musical piece which serves as a candidate is searched, and it transmits to the portable telephone 1 as a music content for viewing and listening.
[0189]Here, in Step S213, the portable telephone 1 performs candidate reception and receives the music content for viewing and listening of the musical piece which serves as the candidate as search results from the music distribution server 6. In Step S214, the portable telephone 1 reproduces the music content for the audition of the musical piece which serves as a candidate. By this processing, a user determines whether which musical piece of the musical piece transmitted as a candidate is a musical piece considered as a request.
[0190]In Step S215, the portable telephone 1 performs purchase processing. That is, a user chooses the musical piece considered as a request by the above-mentioned audition processing, and performs purchase processing about the music content of the selected musical piece.
[0191]At this time, in Step S223, the music distribution server 6 performs message distribution processing of a music content, and transmits the music content of the musical piece expected of purchase by purchase processing to the portable telephone 1. In Step S215, the portable telephone 1 also performs reception of the music content from the music distribution server 6.
[0192]In the above explanation, in the associated data of a musical piece, the music content for the audition of the musical piece which serves as a candidate, and the transfer of a music content purchased, although the communication with the portable telephone 1 and the music distribution server 6 is performing communicative connection and cutting at any time for the processing of every, In a series of processings, the communication with the portable telephone 1 and the music distribution server 6 may be made to be performed, while it had been connected by it.
[0193]While it has been in the state where mutual was connected, it may be made to perform processing which transmits music data to the music distribution server 6 from the portable telephone 1 as associated data of the music content which wishes to distribute by raw sound recording. In this case, in [sound recording processing of Step S211 will be omitted, and] Step S82 (drawing 17) of transmitting processing, The processing will be started, if the decision key 17 is pressed where the reversing display part 72 on music / words selection picture 121 is located in "raw sound recording" as shown in drawing 29 (A).
[0194]In Step S88, CPU35 displays the connection screen 161 as shown in drawing 29 (B) LCD13. When the recording key 17 is pressed, CPU35, The microphone 19 is controlled, it changes into a sound recording state, and the raw sound recording screen 162 as it transmits to the music distribution server 6 via the communications department 33 and shows drawing 29 (C) LCD13 the sound inputted from the microphone 19 is displayed. "Now Live Recording" which shows that the present student sound recording is performed is displayed on the raw sound recording screen 162.
[0195]At this time, the music distribution server 6 memorizes the music data (raw-recorded) transmitted from the portable telephone 1, and searches the music content this [whose] perform music content retrieval processing and a user considers as a request as associated data of a musical piece.
[0196]Thus, the music which is flowing all over humming or a town as associated data of a musical piece in which a user wishes to distribute where the music distribution server 6 is connected with the portable telephone 1 can be transmitted to the music distribution server 6 in real time.
[0197]Even when the track name or artist name of a music content a user expects distribution are not known according to the above, it becomes possible in inputting humming of the musical piece, music data, or some words to receive distribution of the music content of a desired musical piece.
[0198]Although a series of processings mentioned above can also be performed by hardware, they can also be performed with software. The computer by which the program which constitutes the software is included in hardware for exclusive use when performing a series of processings with software, Or it is installed in the personal computer, for example, are general-purpose, etc. which can perform various kinds of functions from a recording medium by installing various kinds of programs.

[0199]. A user is provided with this recording medium in the state where it was beforehand included in the music distribution server 6 as shown in drawing 4. Not only apart from HDD54 on which the program is recorded but apart from a computer, The magnetic disk 211 (a floppy (registered trademark) disk is included) which is distributed in order to provide a user with a program and with which the program is recorded, the optical disc 212 (CD-ROM (Compact Disk-Read Only Memory).) DVD (Digital Versatile Disk) is included -- it is constituted by the package media which consist of the magneto-optical disc 213 (MD (Mini-Disk) is included) or the semiconductor memory 214 (Memory Stick is included).
[0200]In this specification, even if the processing serially performed in accordance with an order that the step which describes the program recorded on a recording medium was indicated is not of course necessarily processed serially, it includes a parallel target or the processing performed individually.
[0201]In this specification, a system expresses the whole device constituted by two or more devices.
[0202]
[Effect of the Invention]According to the program of the 1st information processor of this invention, a method, and a recording medium, the associated data of a musical piece is transmitted to other information processors, and the music content of the musical piece distributed from other information processors was received based on the transmitted associated data of a musical piece.
[0203]According to the program of the 2nd information processor of this invention, a method, and a recording medium. The associated data of a musical piece is received from other information processors, the music content of the musical piece corresponding to the associated data of the musical piece which received is searched, and the music content of the searched musical piece was distributed to other information processors.
[0204]According to the program of the information processing system of this invention, a method, and a recording medium. Memorize the associated data of a musical piece which the 1st information processor inputted, and the associated data of the memorized musical piece is transmitted to the 2nd information processor, Based on the transmitted associated data of a musical piece, the music content of the musical piece distributed from the 2nd information processor is received, The 2nd information processor receives the associated data of a musical piece from the 1st information processor, searches the music content of the musical piece corresponding to the associated data of the musical piece which received, and distributed the music content of the searched musical piece to the 1st information processor.
[0205]Also in any, even when the track name or artist name of a music content a user expects distribution are not known, distribution of the music content of a desired musical piece is attained in inputting humming of the musical piece, music data, or some words.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1]It is a figure showing the composition of the music distribution system which applied this invention.
[Drawing 2]It is an outline view of the portable telephone of drawing 1.
[Drawing 3]It is a block diagram of the portable telephone of drawing 1.
[Drawing 4]It is a block diagram of the music distribution server of drawing 1.
[Drawing 5]It is a flow chart explaining processing of the portable telephone of drawing 1.
[Drawing 6]It is a figure showing the screen displayed on LCD at the time of the call processing of drawing 5.
[Drawing 7]It is a flow chart explaining the dispatch call processing of drawing 5.
[Drawing 8]It is a figure showing the screen displayed on LCD at the time of sound recording processing of drawing 5.
[Drawing 9]It is a flow chart explaining sound recording processing of drawing 5.
[Drawing 10]It is a figure showing the screen displayed on LCD at the time of regeneration of drawing 5.
[Drawing 11]It is a flow chart explaining regeneration of drawing 5.
[Drawing 12]It is a figure showing the screen displayed on LCD at the time of the words input process of drawing 5.
[Drawing 13]It is a flow chart explaining the words input process of drawing 5.
[Drawing 14]It is a figure showing the screen displayed on LCD at the time of the words confirming processing of drawing 5.
[Drawing 15]It is a flow chart explaining the words confirming processing of drawing 5.
[Drawing 16]It is a figure showing the screen displayed on LCD at the time of transmitting processing of drawing 5.
[Drawing 17]It is a flow chart explaining transmitting processing of drawing 5.
[Drawing 18]It is a flow chart explaining the associated data reception of the music distribution server of drawing 1.
[Drawing 19]It is a flow chart explaining the music content retrieval processing of the music distribution server of drawing 1.
[Drawing 20]It is a flow chart explaining the candidate reception of drawing 5.
[Drawing 21]It is a figure showing the screen displayed on LCD at the time of the candidate reception of drawing 5.
[Drawing 22]It is a figure showing the screen displayed on LCD at the time of audition processing of drawing 5.
[Drawing 23]It is a flow chart explaining audition processing of drawing 5.
[Drawing 24]It is a figure showing the screen displayed on LCD at the time of the purchase processing of drawing 5.
[Drawing 25]It is a flow chart explaining the purchase processing of drawing 5.
[Drawing 26]It is a flow chart explaining the music content message distribution processing of the music distribution server of drawing 1.
[Drawing 27]It is a flow chart explaining the mail arrival call processing of drawing 5.
[Drawing 28]It is a flow chart explaining the message distribution processing of the music content in the music distribution system of drawing 1.
[Drawing 29]When raw sound recording is chosen, it is a figure showing the screen displayed on LCD.
[Description of Notations]
1a thru/or 1d A portable telephone and 2a thru/or 2d. A base station and 3 A public network and 4 A supervisory control part and 5. An access server and 6 A music distribution server and 7. The Internet, 8a or 8z WWW server, and 11. An antenna and 12 A loudspeaker, 13 LCD, and 14. A number and a character input key, and 15 A function selection key and 16. A decision key, 17 recording keys, 18 power keys, and 19 [A telephone call end button and 31 / A final controlling element, the 33 communications department 34DSP, 35 CPU, and 36 / A memory, 51 CPU, 54 HDD, and 59 / Communications department] A microphone, and 20a and 20b A cursor key and 21 A telephone call button and 22

[Translation done.]

* NOTICES *

JPO and INPIT are not responsible for any
damages caused by the use of this translation.

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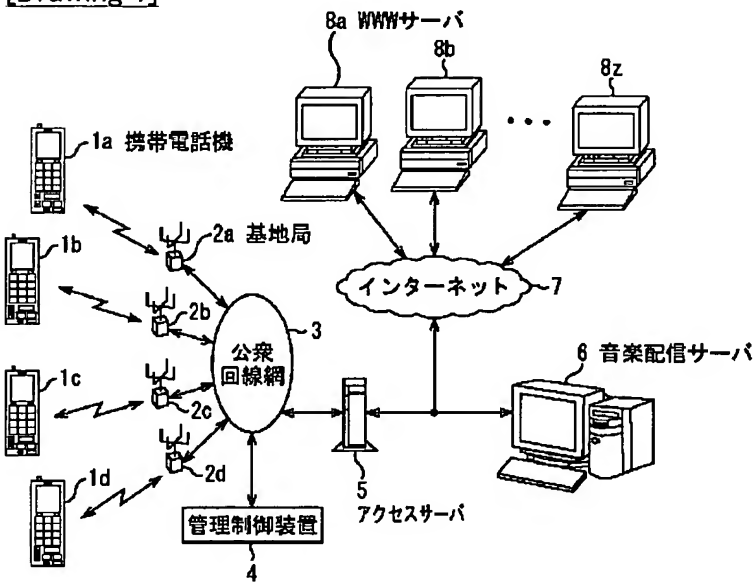
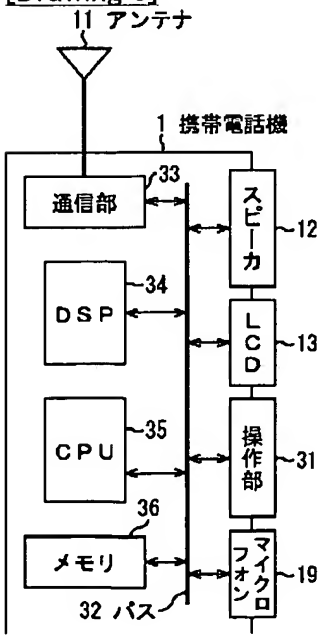
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DRAWINGS

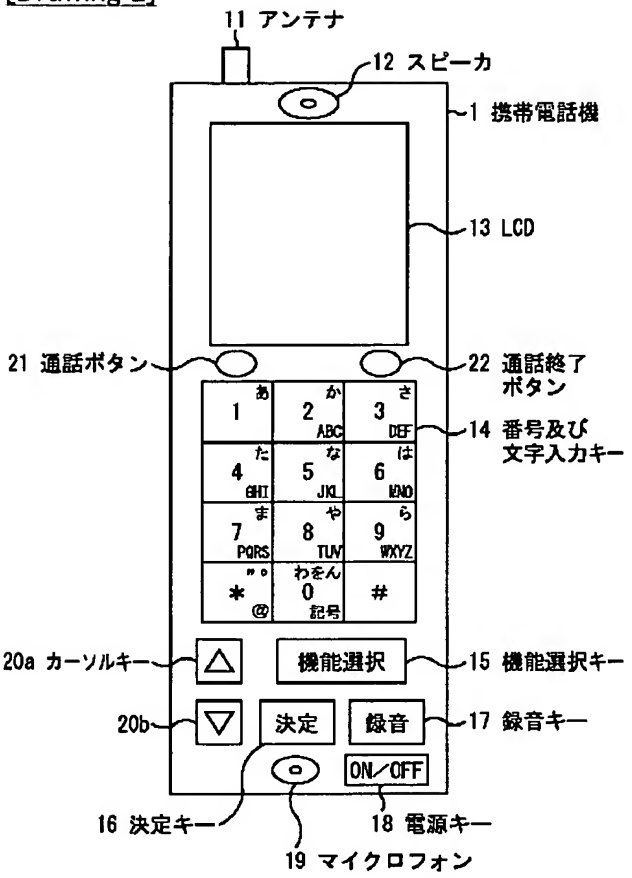
[Drawing 1]



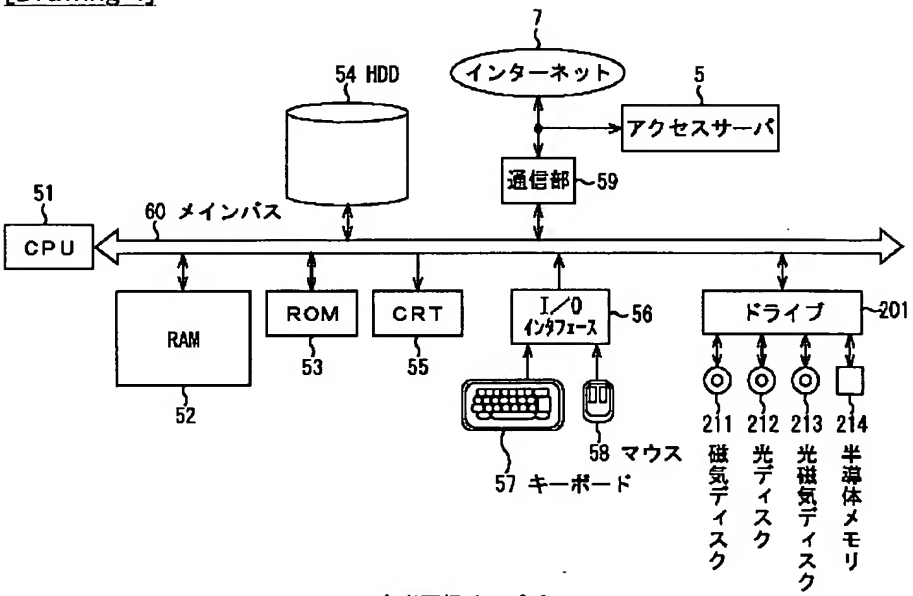
[Drawing 3]



[Drawing 2]

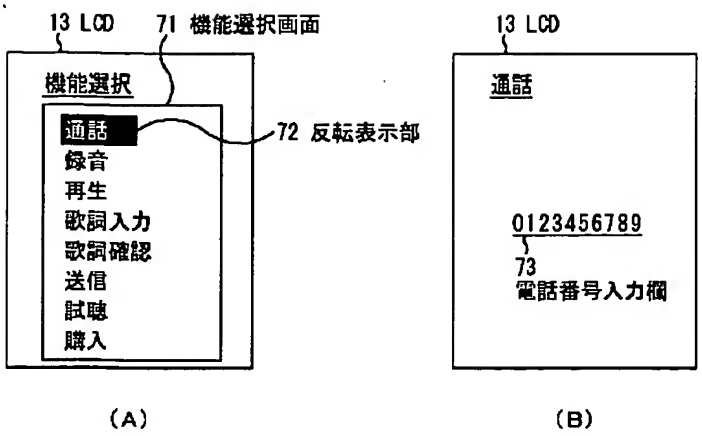


[Drawing 4]

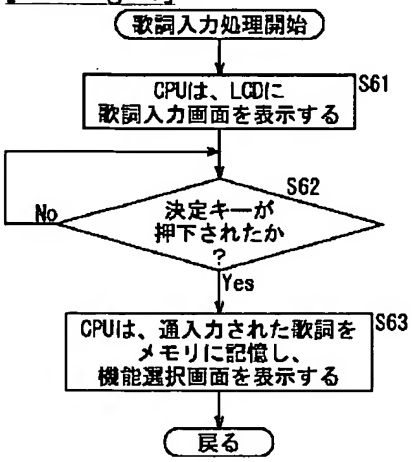


音楽配信サーバ 6

[Drawing 6]

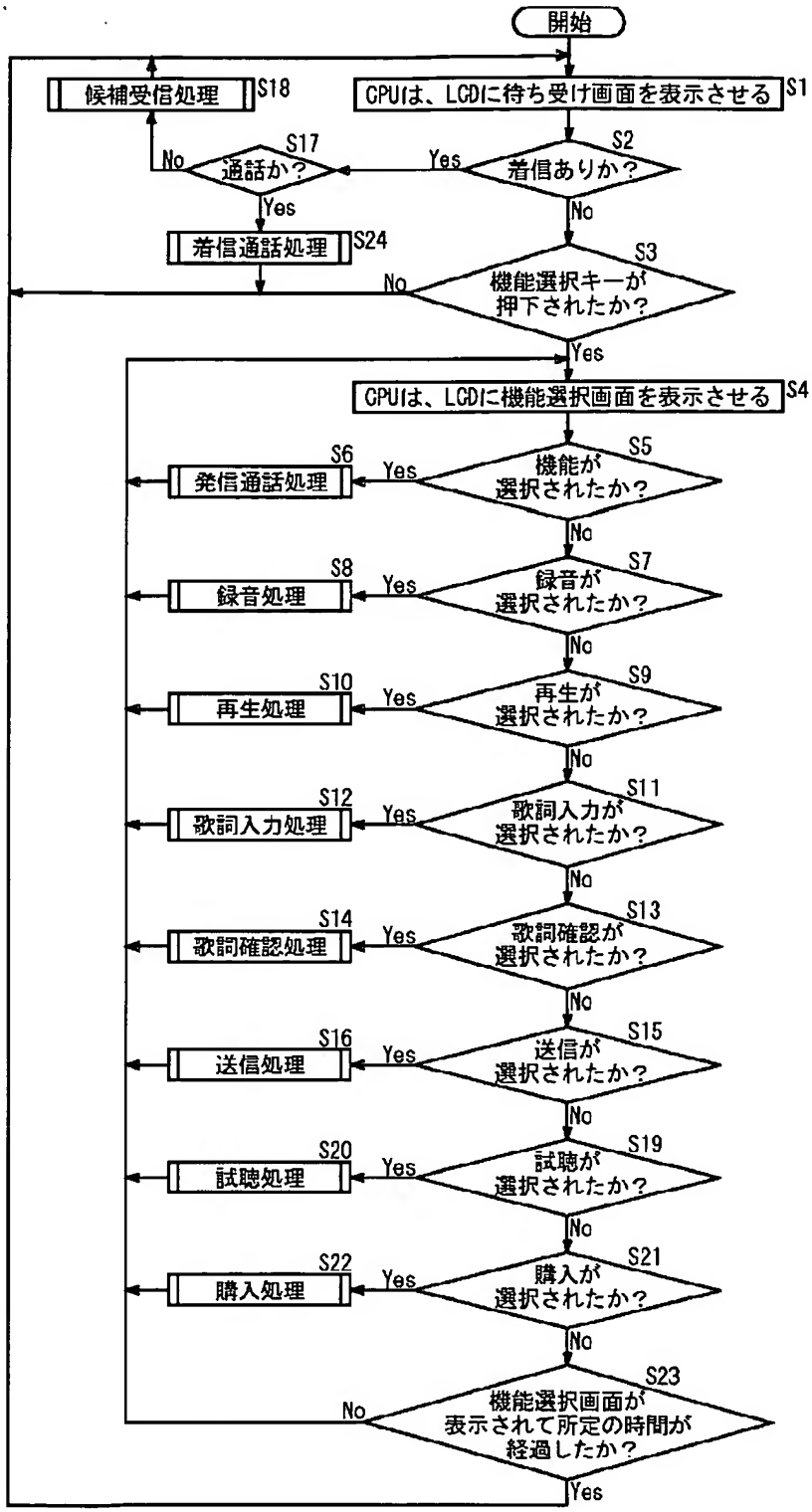


[Drawing 13]

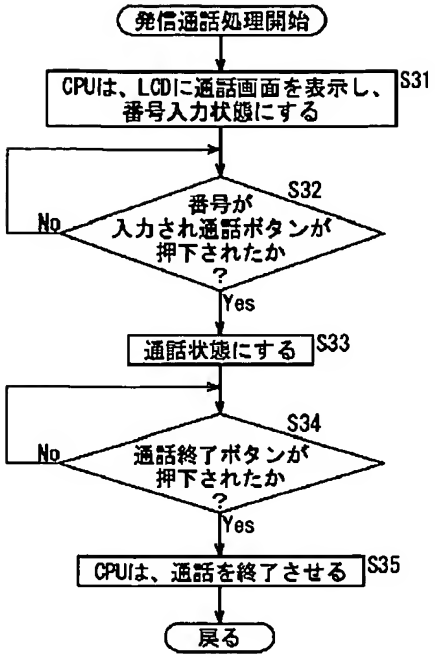


[Drawing 21]

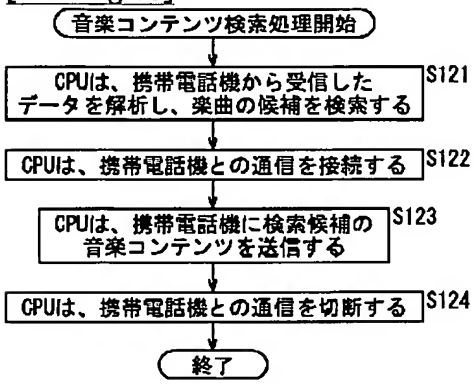
[Drawing 5]


開始
CPUは、LCDに待ち受け画面を表示させる
S1
着信ありか？
S2
Yes
No
通話か？
S17
No
Yes
候補受信処理
S18
着信通話処理
S24
機能選択キーが押下されたか？
S3
No
Yes
CPUは、LCDに機能選択画面を表示させる
S4
機能が選択されたか？
S5
Yes
発信通話処理
S6
録音が選択されたか？
S7
Yes
録音処理
S8
再生が選択されたか？
S9
Yes
再生処理
S10
歌詞入力が選択されたか？
S11
Yes
歌詞入力処理
S12
歌詞確認が選択されたか？
S13
Yes
歌詞確認処理
S14
送信が選択されたか？
S15
Yes
送信処理
S16
試聴が選択されたか？
S19
Yes
試聴処理
S20
購入が選択されたか？
S21
Yes
購入処理
S22
機能選択画面が表示されて所定の時間が経過したか？
S23
No
Yes

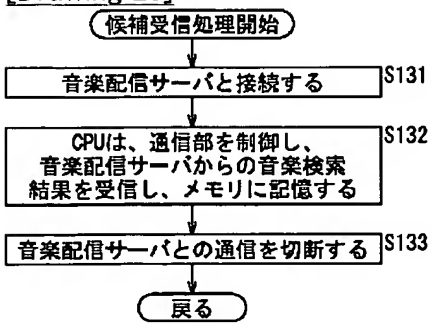
[Drawing 7]



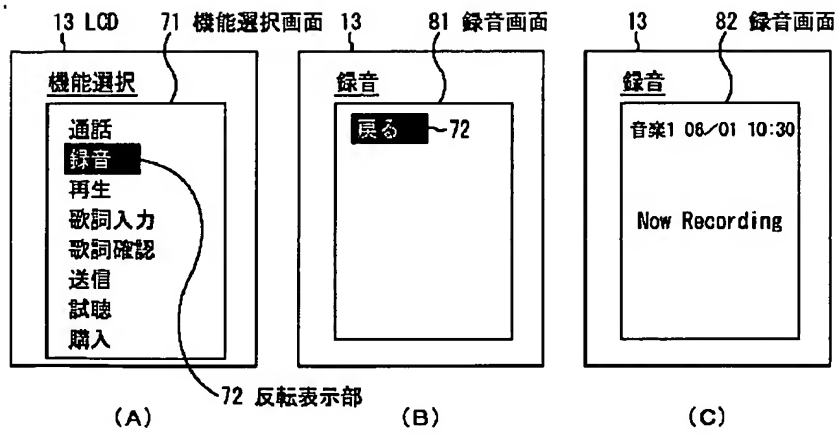
[Drawing 19]



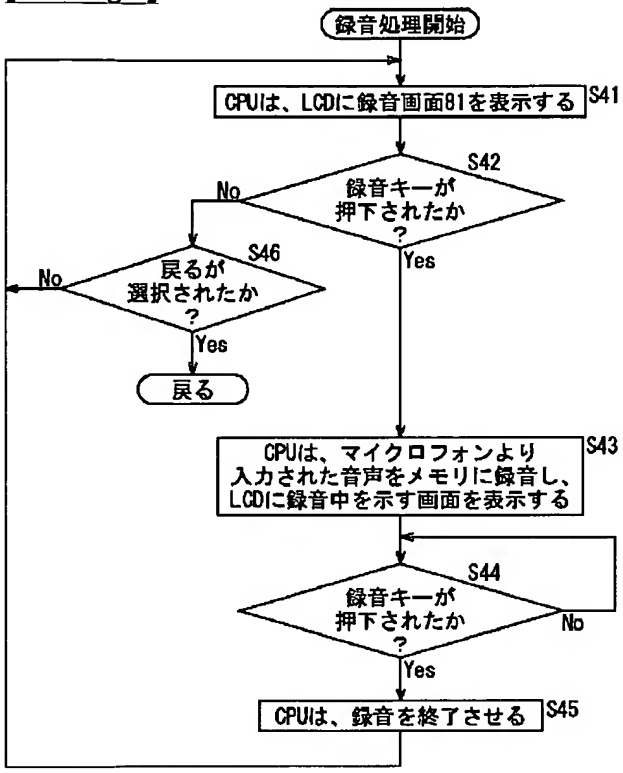
[Drawing 20]



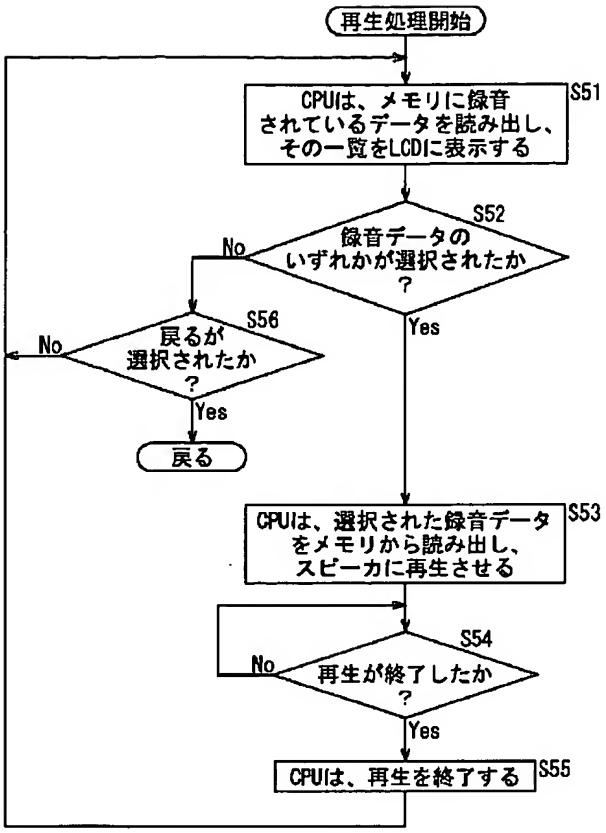
[Drawing 8]



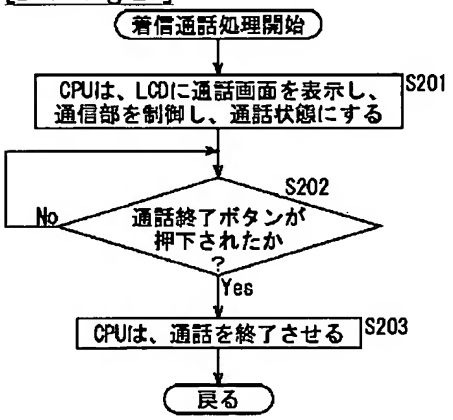
[Drawing 9]



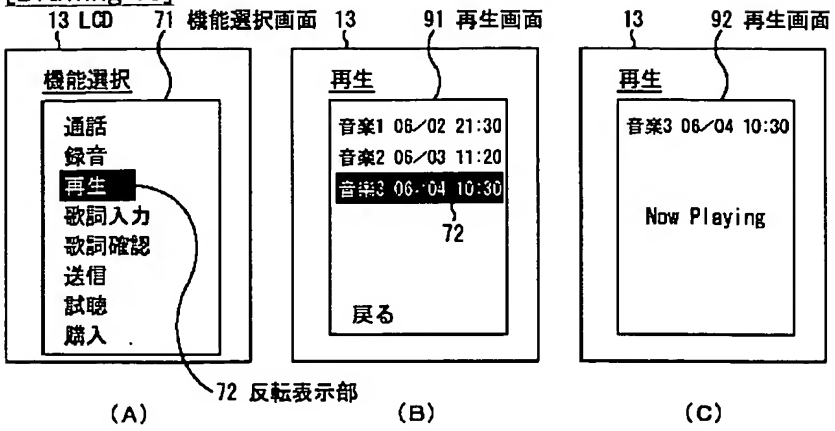
[Drawing 11]



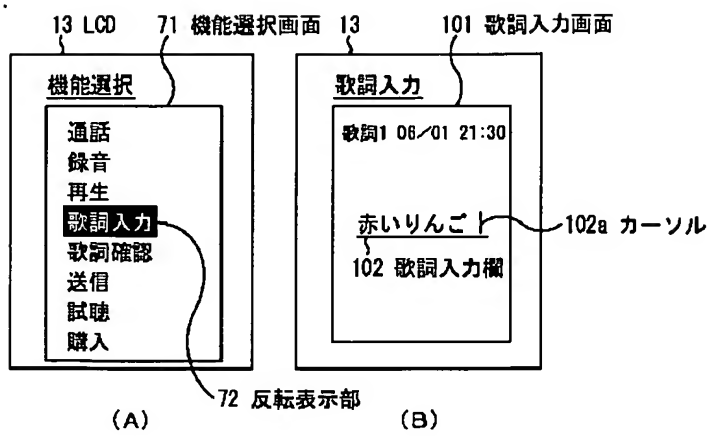
[Drawing 27]



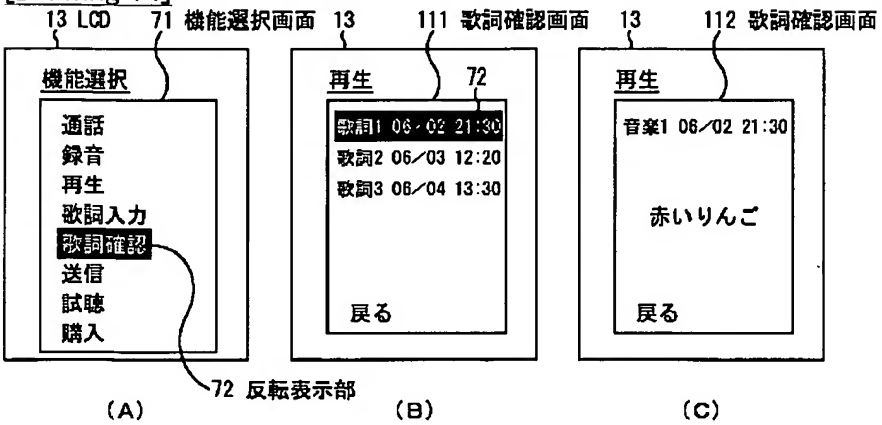
[Drawing 10]



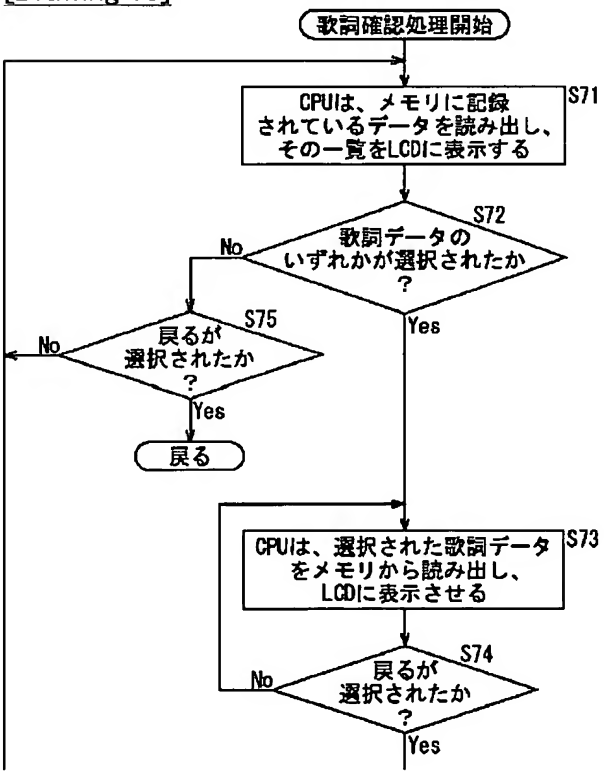
[Drawing 12]



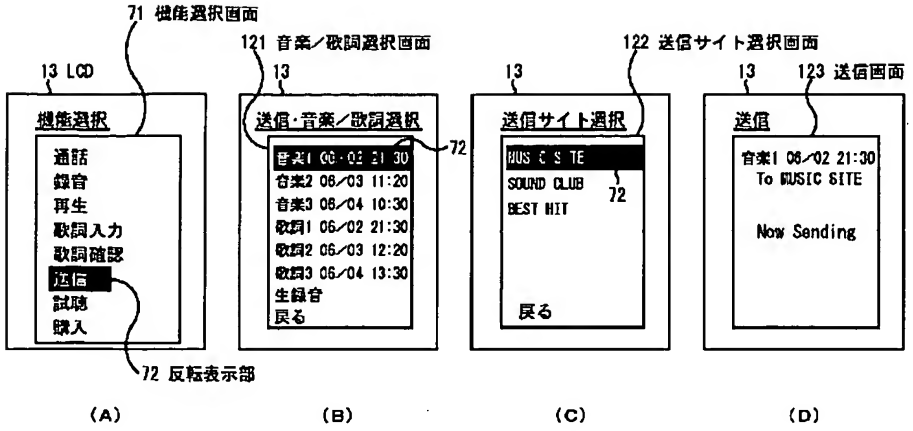
[Drawing 14]



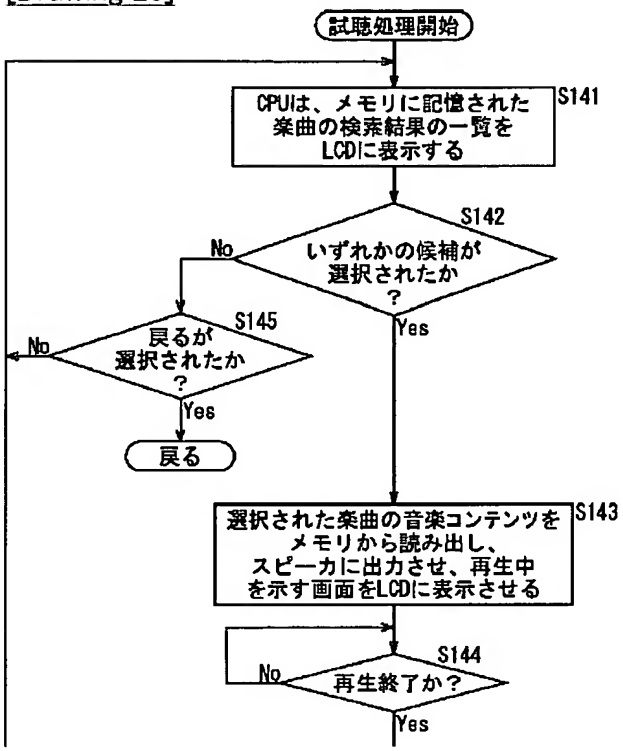
[Drawing 15]



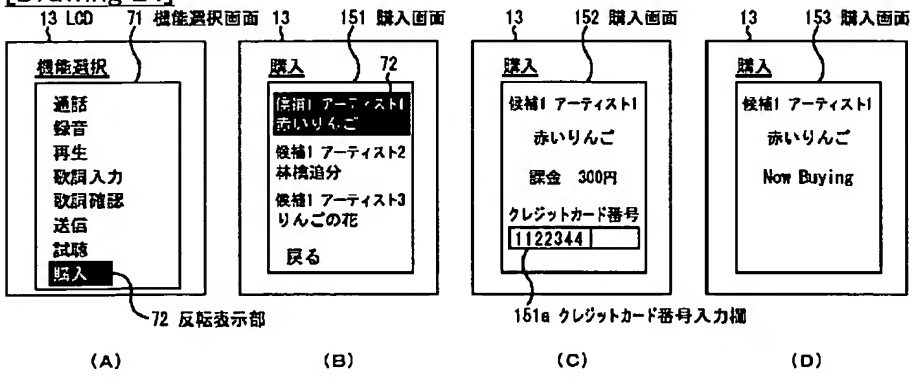
[Drawing 16]



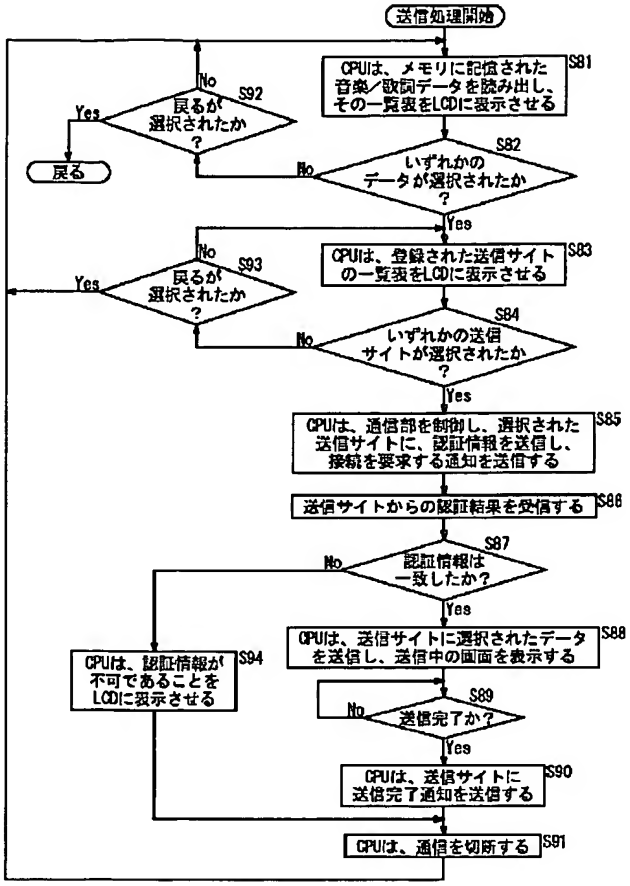
[Drawing 23]



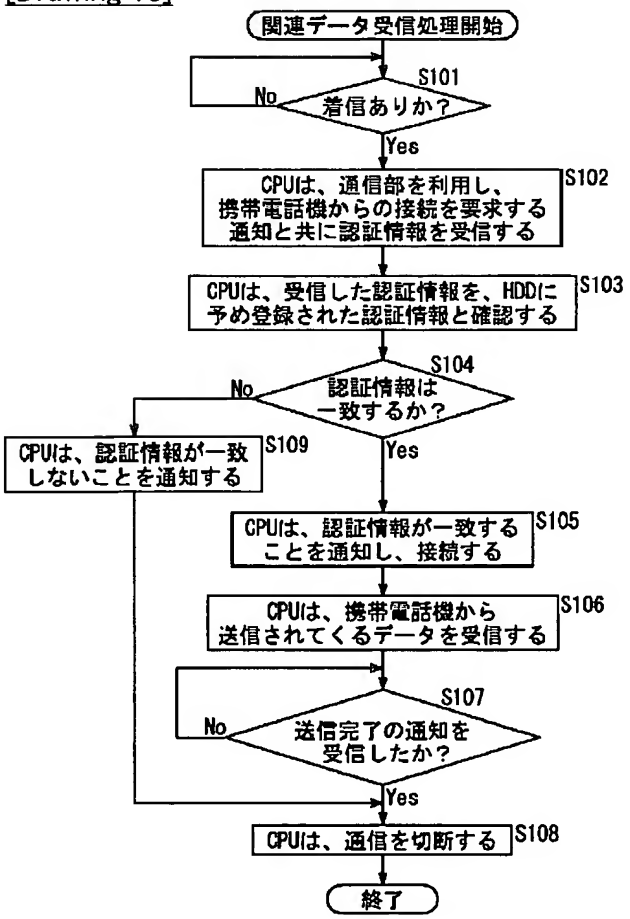
[Drawing 24]



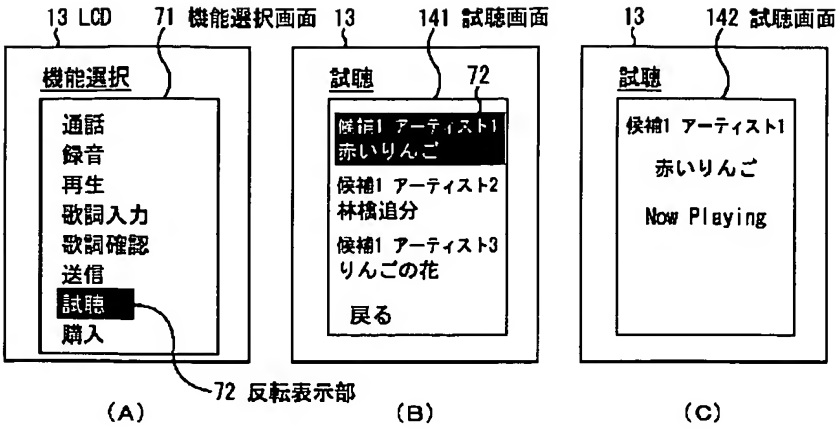
[Drawing 17]



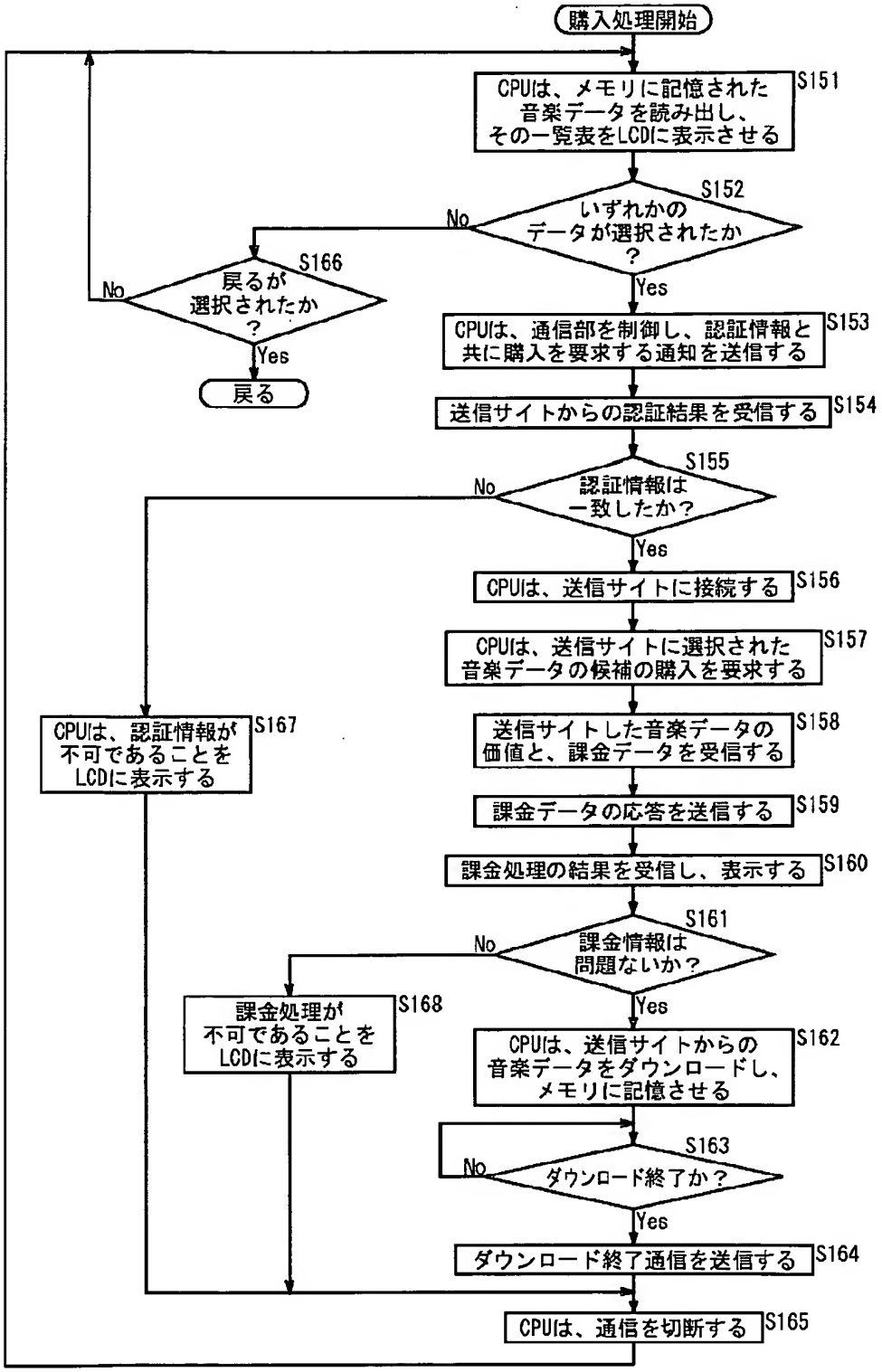
[Drawing 18]



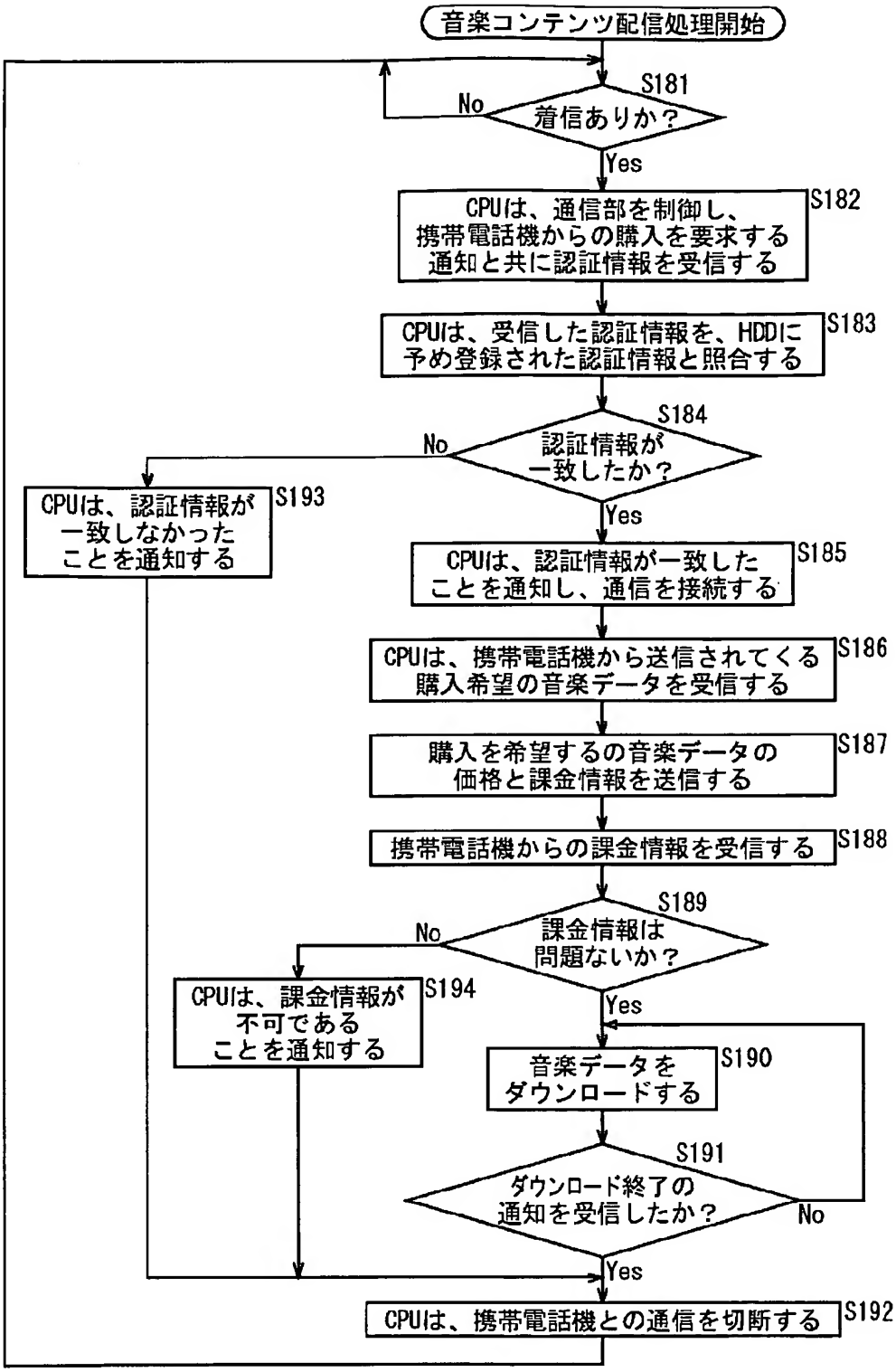
[Drawing 22]


13 LCD
71 機能選択画面
機能選択
通話
録音
再生
歌詞入力
歌詞確認
送信
試聴
購入
72 反転表示部
(A)
13
141 試聴画面
試聴
72
候補1 アーティスト1
赤いりんご
候補1 アーティスト2
林檎追分
候補1 アーティスト3
りんごの花
戻る
(B)
13
142 試聴画面
試聴
候補1 アーティスト1
赤いりんご
Now Playing
(C)

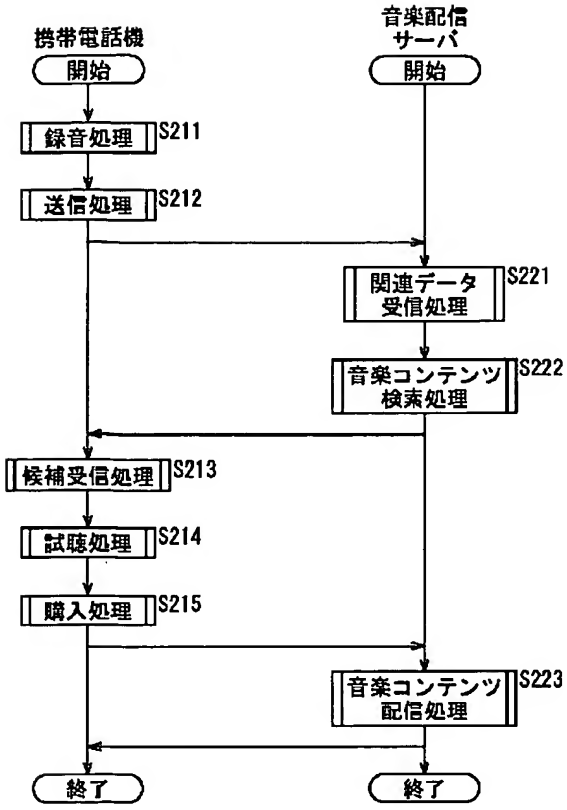
[Drawing 25]


購入処理開始
CPUは、メモリに記憶された音楽データを読み出し、その一覧表をLCDに表示させる
S151
いずれかのデータが選択されたか？
S152
No
Yes
戻るが選択されたか？
S166
No
Yes
戻る
CPUは、通信部を制御し、認証情報と共に購入を要求する通知を送信する
S153
送信サイトからの認証結果を受信する
S154
認証情報は一致したか？
S155
No
Yes
CPUは、送信サイトに接続する
S156
CPUは、送信サイトに選択された音楽データの候補の購入を要求する
S157
CPUは、認証情報が不可であることをLCDに表示する
S167
送信サイトした音楽データの価値と、課金データを受信する
S158
課金データの応答を送信する
S159
課金処理の結果を受信し、表示する
S160
課金情報は問題ないか？
S161
No
Yes
課金処理が不可であることをLCDに表示する
S168
CPUは、送信サイトからの音楽データをダウンロードし、メモリに記憶させる
S162
ダウンロード終了か？
S163
No
Yes
ダウンロード終了通信を送信する
S164
CPUは、通信を切断する
S165

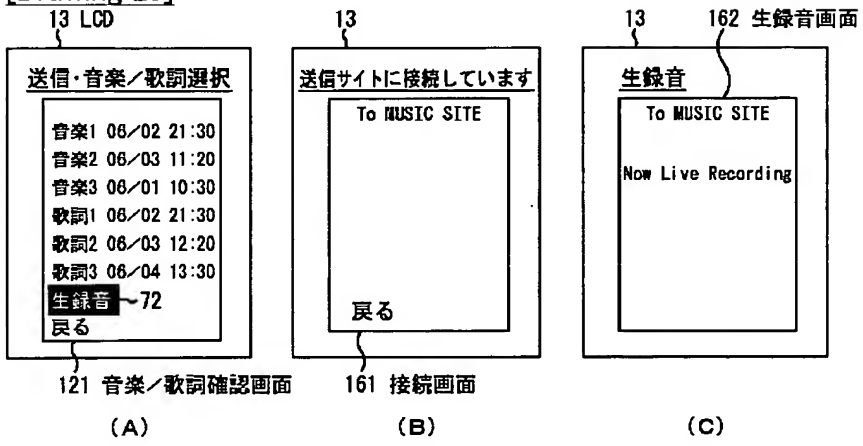
[Drawing 26]


音楽コンテンツ配信処理開始
S181
着信ありか？
No
Yes
S182
CPUは、通信部を制御し、携帯電話機からの購入を要求する通知と共に認証情報を受信する
S183
CPUは、受信した認証情報を、HDDに予め登録された認証情報と照合する
S184
認証情報が一致したか？
No
Yes
S193
CPUは、認証情報が一致しなかったことを通知する
S185
CPUは、認証情報が一致したことを通知し、通信を接続する
S186
CPUは、携帯電話機から送信されてくる購入希望の音楽データを受信する
S187
購入を希望するの音楽データの価格と課金情報を送信する
S188
携帯電話機からの課金情報を受信する
S189
課金情報は問題ないか？
No
Yes
S194
CPUは、課金情報が不可であることを通知する
S190
音楽データをダウンロードする
S191
ダウンロード終了の通知を受信したか？
No
Yes
S192
CPUは、携帯電話機との通信を切断する

[Drawing 28]



[Drawing 29]



[Translation done.]